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ABSTRACT

Designed to assist library managers in conducting effective cost studies, this document provides a summary of the data for the 81 member libraries which responded to a survey of technical services cost studies conducted by the Association of Research Libraries (ARL) in April 1982, and seven reports of such studies. These reports, which range from terse statements of overall costs to detailed time-and-motion studies, with examples of both top-down and bottom-up approaches, are as follows: (1) "Cataloging, Binding, and Processing Costs 1980/81," Syracuse University; (2) "The Year's Work: Resources Used, Benefit/Cost, 1981," University of Maryland; (3) "Projected Cost Study for Technical Services for 1982-83; Unit Activities, Statistics, and Automation Developments; and Staff Costs by Unit," University of Kentucky; (4) "Statement of Desired Data for Determining the Costs of Maintaining RL Catalogs, 1976-77," Research Libraries Group; (5) "Technical Service Division Work Assignments Staffing Profile, 1978," Washington State University; (6) "Cost Study of the Central Technical Services Department; Cost of the Serials Currently Received Process, 1980," Cornell University; and (7) "Review of Collection Policy Alternatives, 1980," New York Public Library. (LMM)

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Technical Services Costs in ARL Libraries

Kit 89

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Kit documents come from general membership surveys and from selected libraries contacted directly by SPEC, and most Kits are produced within six months of surveys. The documents' value comes from their variety of ideas, methods, and solutions. They are not viewed as finished products, but rather as points of departure for a library's planning efforts and as stimulants to innovative approaches to problem-solving. As such, Kits do not present answers or prescriptions for any one library; instead they illustrate how selected ARL members are planning for or dealing with particular issues. The worth of any one Kit to a particular library will depend upon the specific topic covered and the library's stage of development in that area.

Materials are selected according to the following criteria:

- Presents an approach of potential value to administrators and decision-makers
- Timely, and dealing directly with the topic under consideration
- Probability of application of ideas or thinking to other library situations
- Illustrative of actual practice, rather than theoretical
- Understandable, readable communication

All together, the materials should provide a range of alternative approaches that complement each other, provide variety, and stimulate comparison and contrast.

Libraries can take advantage of the Kit compilations in a number of ways. Administrators can evaluate the assumptions, methods, and results of other libraries' approaches; compare and contrast them; and use the learnings in their own situations. Library staff members can use the kits as professional development and current awareness tools. Committees and task forces can use them to begin a review of current practices. And the Kits can identify other persons or places to contact for further information. Back-up files in the SPEC office also are available for loan to member libraries. In addition, SPEC will conduct on-demand surveys or analyses geared specifically for a single library.

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TECHNICAL SERVICES COST STUDIES IN ARL LIBRARIES

While accounting for the costs of technical services has long been a responsibility of library managers, this concern has become more focused in recent years as libraries have encountered major challenges such as automation, new cataloging codes, and consortium membership. Large libraries' traditional reasons for doing cost studies are those of classical good management: understanding one's operation and monitoring it with an eye to improvement. Technical services comprise a production line of a multitude of individual steps, capable of performance in a variety of ways by differentially--paid individuals. The overall process is sufficiently complex that it resists intuitive analysis; by reducing data to dollar figures, more credible statements of efficiency and effectiveness can be made.

There seems to be little assistance in the literature for managers seeking to do effective cost studies. Few large libraries report having done cost studies of major technical services operations in the past few years. It has been suggested that libraries' non-profit status has reduced the pressure for routine cost analyses. Certainly when large libraries do cost studies, it is often as a consequence of an externally-imposed stimulus. These vary widely: prospective network membership, the need to determine indirect cost rates in connection with Federal contracts, governmental reporting requirements at state and local levels, cost determinations for services to other agencies, and the potential impact of AACR2 are among the many reasons cited. In an April 1982 SPEC survey to which 81 of 113 ARL libraries responded, a third had done a study of technical services costs in the last three years; less than half of these indicated that such studies were normal and routine, or were used for general management assistance.

In contrast is the need expressed by about three-fourths of the survey respondents for comparative cost data from peer institutions as an aid in managing their own operations. Although some librarians questioned just how comparable such data could be, this pragmatic doubt did not outweigh the perceived desirability of such data. The stated need for comparability is highlighted by the considerable variations in the cost studies as exhibited in the SPEC kit, which range from terse statements of overall costs to detailed time-and-motion studies of specific operations.

The varied study formats in part reflect the differences in study purposes. The magnitude of the operation studied, its product, the use to which study results will be put, and the desired level of precision all affect the choice of methodology -- as do the skill, sophistication and purpose of the study director. Most studies attempt to present a simple statement of cost of an operation at a particular time. A few relate this cost to costs at earlier times, or to costs of similar operations at the same or another institution.

Broadly speaking there are two different, useful, approaches to cost analysis: the top-down and the bottom-up. Each is represented by examples in the accompanying kit. The top-down approach assigns categories of known expenditure to categories of known product over gross periods of time, often a fiscal year. Depending on the depth to which data are available, the technique allows estimates accurate for many purposes to be developed administratively in a short time. Thus the total cost for a library's technical

services operation can be obtained from annual personnel, materials and equipment costs. Assumptions will have to be made (and stated) about fringe benefits, building costs, administrative overhead, and the like. Unfortunately, it is usually easier for a library to determine these data than to fix exactly what was worked on during the year (books bought, serials cataloged, titles -- or volumes -- added to the collection, backlogs diminished), which is essential if later-year cost comparisons are to be made. Similarly, costs for a department (cataloging, searching, etc.) can be obtained; costing a more specific function ("pre-catalog searching") is more difficult using this method as individuals often divide their time between functions.

The bottom-up technique calls for painstaking analysis of very specific functions (e.g. the time spent by a professional to search 10 items in a card catalog, or the time spent by a support staff level III to file a Kardex record). Such studies can be very useful when contemplating procedural changes at such levels, and some proponents believe them to be essential as a building block for determining overall costs. A very few such large-scale bottom-up studies take into account the difficulties associated with non-productive paid time (e.g. sick leave, work breaks), margin of error in extrapolation from study sample to total population, and the Hawthorne effect. In general, as the scope of the study is widened, the detailed approach becomes harder to control.

Inevitably, the two approaches merge in many studies. Each has its distinct uses. Where a change is envisioned in the details of a process (e.g., invoice routing) or a product (e.g., inclusion of certain tracings), the bottom-up approach can give guidance on specific costs associated with alternatives. Where a major change in process is involved — e.g., automation of acquisitions -- the detailed functions will change so radically that only an overall approach is possible. Where a major change in the product is envisioned (e.g., AACR2 implementation, or the purchase of microfilm instead of print for a large portion of materials), it is arguable which method is best. Where historical or comparative data will be desired, it is probable that, as the time period increases, the larger-scale should be the analysis. That is, it may be possible to compare this year's filing costs with last year's, but over five years (or across institutions) the differences in technique and staffing may be so great that the costs of catalog maintenance, however defined, may be the more useful point of comparison.

The need for comparability, either with one's own previous data or with that of a peer library, has been widely acknowledged both in the present survey and by ARL directors at public forums over the past few years. Without comparable figures as a benchmark, a stated cost stands alone in a void, resistant to analysis. Data from the past can show the effects of organizational change, giving guidance to a capable manager. Comparable data from a peer institution will force the perceptive manager to re-examine local procedures to determine reasons for cost differences--and re-examination will almost always lead to improvements. The development of standards of comparability is yet to be done. There is some thought that time elements are more useful for comparison than cost elements. There is not yet consensus on what defines many work processes that might be compared, e.g., copy cataloging; nor even on certain basic definitions such as of continuations, or when titles and when volumes are the units of productivity. Until such definitions are standardized, it will be well if even internal cost studies make explicit as many of their definitions and assumptions as possible, thus extending their usefulness both in time and for different audiences.

SPEC Kit #89 (November-December 1982, 104 pages) on Technical Services Cost Studies contains four examples of top-down studies, and three examples of bottom-up studies, and a summary of SPEC Survey data. SPEC Kits are available mainly by subscription. Single copies may be purchased, when available, for $15.00, with checks made payable to "ARL Office of Management Studies." Ordering address is: SPEC Center, ARL/OMS, 1527 New Hampshire Ave., N.W., Washington, D.C. 20036. Library members of ARL receive SPEC kits for $7.50.

PETER S. GRAHAM, HEAD, BOOK ACQUISITIONS DEPARTMENT,
COLUMBIA UNIVERSITY LIBRARIES, PREPARED THIS FLYER/KIT
AS PART OF THE OMS COLLABORATIVE RESEARCH/WRITING PROGRAM.

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SPEC KIT #89 NOVEMBER-DECEMBER 1982

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"A useful work is Diane Davis Cole's Mathematical Models in Library Management: Planning, Analysis, and Cost Assessment (Ph.D. Diss., Univ. of Texas at Austin, May 1976), especially pages 153-244. It is available from University Microfilms as no. 76-26,612."

OFFICE OF MANAGEMENT STUDIES

ASSOCIATION OF RESEARCH LIBRARIES 1527 New Hampshire Avenue, N.W., Washington, D.C. 20036 • (202) 232-8656

ARL TECHNICAL SERVICES COST STUDIES SURVEY, April 1982.

Summary of survey data.

I. The following questions were asked:

1. Has your library conducted a cost study of a major technical services department or function within the last three years?
2. If Yes, for what purpose(s)?
3. In retrospect, of what help was the study?
   --none, some, very much, essential (please explain);
4. Do you see a need for comparative cost data from peer institutions in size or mission to aid libraries in managing their own operations?

There were 81 responses from the 113 ARL libraries.

II. Crosstabulation of Questions 1 and 4:

See need for comparative cost data?

Conducted study in last 3 years?	YES	NO	No Answer	TOTALS
YES	24	3	0	27 (33%)
NO	36	9	9	54 (67%)
TOTALS	60 (74%)	12 (15%)	9 (11%)	81(100%)

III. For those answering YES to question 1 (n=27), question 3 asked of what help the study was:

None	0,	0%
Some	14,	52%
Very much	5,	15%
Essential	7,	26%
no answer	1,	4%

Compiled by Peter S. Graham, Columbia University Libraries

IV. Some extended responses to question 3, "Of what help was the study (please explain)?"

a. "To establish a yearly cost/benefit ratio; unit costs needed for planning. Regularly included in the annual report."

b. "Assert library's right to do such a study; evaluate specific methodology of study; evaluate usefulness of data gathered in this manner as opposed to data gathered routinely."

c. "We have used this method frequently to determine appropriate charges for services and products, to compare the cost-effectiveness of using outside contract assistance, and to answer management questions such as the impact of AACR2."

d. "I think most libraries ought to know what it costs to add a title to the collection. We have used the figure for determining process costs to lost bo[illegible] [sic]. It is also helpful in comparing this with other studies done."

e. "To gain credibility with University Administration for request for a new automated system."

f. "Determined the method to be followed (in a retrospective conversion); type of manpower and equipment required, which impacted on funds required; size of project, length of project."

g. "It aided the selection among various alternatives and provided information on necessary staffing. Since the study involved a number of people, it fostered general understanding towards the development of new programs and promoted acceptance among staff when changes occurred."

h. "Because of rapidly changing factors (e.g. inflation and economy) and the difficulty in identifying like activities that can be compared, cost studies are valid only on a gross level for gross comparisons."

i. "Structure of technical services cost components is essential for informed management of these operations."

j. "The data was of interest, but was not used."

k. "Comparison with previous studies. Helped determine if processing costs are rising too fast."

l. "Enabled (us) to choose most cost effective bibliographic utility for on-line cataloging."

m. "Confirmed some observed patterns of change since a comparable study in 1974 and provided a new baseline against which we are likely to check changes in the 'near' future, especially after computer-to-computer data transmission with RLIN permits revision of procedures."

n. "The King Research study...assisted in providing a rationale for a change in bibliographic access patterns.... It also formed the basis for projecting possible cost savings through automation...."

o. "We confirmed our feelings about some costs and revised others; also found where bottlenecks exist...."

p. "Allowed reasonable choice between types of automated catalogs, frequency of cumulation, and costs of present manual technical services workflow and card catalogs."

q. "Of very slight value, because of the tentative, sometimes speculative nature of the data utilized in the study."

r. "Most useful for its comprehensiveness. Study included all library operations and a space inventory. Similar study performed 10 years ago and used comparatively to note changes in book budgets, program expenditures, staffing patterns, effects of inflation and processing costs. Study confirmed some of what we knew indirectly.... Also provided fully allocated unit (staff) costs for monographs and serials technical processing not only in technical services departments but including processing costs incurred in public service units as well."

s. "The analysis was essential in a) explaining automation and technical processing costs to the library staff, library administration, and university officials, and b) estimating the future costs of automation and technical processing, and c) determining how to use staff more efficiently."

t. "We need cost data for budgeting and planning in all areas, as well as for intelligent cost cutting, expenditure justification, explanation of changes over time."

u. "The study has been useful in identifying the factors that must be considered if X is to proceed with membership in RLG/RLIN. Such a study seemed especially important for a public institution such as X where a number of levels of bureaucracy are involved in the final decision."

v. "To establish baseline info."

w. "To support request for funds."

x. "Impossible to do capitalization without this information."

V. Responses to question: "Do you see a need for comparative cost data from peer institutions in size or mission to aid libraries in managing their own operations?" (Yes/No; a comment space was provided.)

A. YES Responses:

(THE FOLLOWING WERE RECEIVED FROM INSTITUTIONS WHICH SAID THEY HAD DONE A MAJOR STUDY OF TECHNICAL SERVICES COSTS WITHIN THE LAST THREE YEARS.)

a. "Because comparative costs are the best way, perhaps the only way, to measure cost effectiveness against the state of the art."

b. "Comparative cost data are especially important to librarians now that their operations are becoming increasingly complex and the available resources are shrinking. Whatever information that can be gathered that will identify improved techniques or procedures will be useful."

c. "It's always helpful to compare across similar institutions."

d. "Comparative costs data are needed to detrmine what are reasonable expenditures for technical processing, especially automation costs of which little is known but many people believe them to be very high. However, comparative cost data will only be meaningful if the institutions are using comparable methodologies."

e. "Yes, would be useful if standardized measures based on data collected along with cost accounting principles were available and stated perhaps as ratios rather than in actual dollar amounts. Differences would or could highlight differences in program emphasis as well as procedural or processing methods. Such comparative data would help to sharpen or define one's operations in a highly objective manner and aid in rationalizing desired performance."

f. "If done carefully, it can be a very useful tool in evaluating and perhaps modifying internal policies and procedures."

g. "I favor the use and dissemination of technical services costs on a general level--e.g. TSCORE and on a specific level--i.e. how much cumulations cost, etc."

h. "Data should assist in identifying areas of inefficiency, provide access to ways of improving efficiency, and provide info useful for supporting staff/budget requests."

i. "To gain baseline information."

j. "As a guideline to determine if our processes are too costly or [are] efficient."

k. "To ascertain local productivity relative to other similar institutions and to identify potential areas of additional savings."

l. "To see if we appear to be 'on target' with our own costs, assuming enough background information is available to identify variations."

m. "Comparison is always useful in the process of evaluation. Since there are relatively few other institutions doing online processes on an inhouse system, usefulness in terms of management may be limited."

n. "It is most desirable. However, this is not an easily achievable goal. A number of ALA and other committees have tried it repeatedly, but with very little success. Such comparative data would be valid only for situations with identical base of all cost ingredients, policies, etc. Moreover, the matter is also institutionally sensitive, as it, for the most part, tends to generate simplifications resulting in comparing apples with oranges."

o. "It is always helpful when planning any type of change to the existing system, but gathering and maintaining this type of data is vey time consuming."

p. "Every institution is unique; some more than others. For an institution the size and complexity of X, it is almost impossible to find valid cost data which are comparative."

q. "Comparative cost data would be useful as we assess alternative approaches to increasing the efficiency of our own internal procedures. It might also serve to support a request for additional staff and/or equipment."

(THE FOLLOWING WERE RECEIVED FROM INSTITUTIONS WHICH SAID THEY HAD NOT DONE MAJOR STUDIES WITHIN THE LAST THREE YEARS.)

r. "This is greatly needed. Major priority."

s. "As well as cost data statistical data should also be available."

t. "Particularly at this time when so many libraries are changing from manual systems to automated ones."

u. "To aid in developing performance standards and doing program evaluation."

v. "So many changes have occurred in processing in recent years that comparative cost data would be very helpful in assessing one's own effectiveness."

w. "Large discrepancies in cost for similar operations in comparable libraries help identify area in the operation on which to focus in the never ending attempt to do it better and cheaper."

x. "Useful for a) background own study; b) budget support documentation."

y. "One of our management goals for the next year is to begin analysis of our allocation of resources to cost centers. Comparative data from peer institutions would aid in that analysis."

z. "Comparisons are useful in the same ratio comparisons are useful to business."

aa. "In order to give studies more than local meaning."

bb. "As a comparative measure of cost-effectiveness/Possible use in budget justification."

cc. "To help see where we are overspending, underspending, etc. To see where our operation is efficient, inefficient."

dd. "The quantifiable nature of technical services makes comparative cost data from peer libraries more useful."

ee. "....Some libraries economize in technical services by providing less adquate bibliographical access than others, or by transferring some of the costs to areas where cost is not analyzed, e.g., an economy in cataloging may result in reference staff having to use publications in addition to the catalog for answering certain kinds of questions. In this regard it would be essential for you to define the content of tasks and functions very closely. Studying technical services costs by themselves may be harmful to library service in the long run. Perhaps studying them in a cost/benefit context, or identifying the most economical workflow and organizational models would be a more beneficial use of...resources."

ff. "But if it is not clear what data elements, etc., were included in a study the information could do more damage than good when using it for comparative purposes."

gg. "To provide points of comparison for monitoring our operations, provided that sufficient information is also present for determining if the data are indeed for comparable situations."

B. NO Responses:

a. "Comparative cost data, at best, may have minimal use, i.e., if data comes from different institutions. Comparative data, say, year to year, prepared by a given institution for self-study may be of much greater value. The kind you have in mind must be considered with the famous grain of salt. Comparing data of different institutions in effect is like comparing apples and oranges."

b. "There is too much variation between institutions in various cost components (e.g. salaries, supplies, level of staff assigned to similar tasks) and in what is included in the cost to be able to meaningfully compare figures between peer institutions. Of greater interest and utility is information on methodology."

c. "Although it might be of marginal value internal factors in each institution (organization, classification used, salary scales, standardization, etc.) affect prices so much that it is hard to compare costs across institutions."

d. "It is difficult to draw conclusions from comparative cost data. I would find unit time data for clearly defined tasks far more meaningful."

e. "1) Cost studies are very costly and time consuming. 2) Institutions generally define the same activities differently. 3) Institutions rarely agree on what is included in direct/indirect costs."

f. "We believe in accountability but are busy being as efficient in processes as we can and do not want to take the time to make detailed cost studies."

g. "I wonder if the degrees of comparability can be explicit enough to deduce whatever you want to deduce."

h. "Frequently, the particular interests of the parent organizations, the nature of the literature managed and the physical environment impose many significant differences in policies and procedures so that the same functions or products of one library are not objectively comparable to those of another. Operations which comparatively appear to be very efficient, too often, are comparatively ineffective. Studies of this type are apt to carry more misinformation than useful enlightenment."

i. "The comparative data is interesting as a curiosity but because of too many local variables, the data from other institutions is seldom useful for local planning. Regular comparative data reports of one's own operations are far more beneficial for analysis and planning."

j. "Not relevant to our purpose."

k. "Labor costs vary in different sections of the country. Also there are variances in methods used for acquisitions, payment and cataloging."

l. "No one has ever come up with reliable cost comparisons."

7

TOP - DOWN STUDIES

SYRACUSE UNIVERSITY LIBRARIES

GENERAL COLLECTIONS

Cataloging, Binding and Processing Costs, 1980/81

Costs		Bird	Law	Total
1. Staff				
Regular				
Acquisitions		$204,346		
Cataloging		299,271		
Subtotal		$503,617	$36,097	$539,714
Fringe Benefit (25.5%		128,422	9,205	137,627
Total		$632,039	$45,302	$677,341
2. Casual Wages				$ 12,193
3. OCLC Charges*				
Card Charges	$ 8,412			
First Time Uses	25,350			
Maintenance	2,657			
Profile	452			
Retrocon	2,128			
Tapes	1,582			
Telecommunications	6,453			
Updates	1,382			
Total				$ 48,416
4. Binding		$106,646	$ 4,078	$110,724
5. Bibliographic Assistants				
15 @$9,003 (Job Rate)				$135,045
Fringe Benefit (25.5%)				34,436
Total				$169,481
GRAND TOTAL				$1,018,155

*Month of June estimated

SYRACUSE UNIVERSITY

SYRACUSE UNIVERSITY LIBRARIES

Estimated Value of Collections

General Collections

(1) Year	(2) Volumes Added	(3) Total Book Expenditures	(4) Av. Cost Per Year	(5) Cataloging, Binding and Processing Unit Cost	(6) Cataloging, Binding and Processing Cost	(7) Total Value of Volumes Added & Bibliographically Organized	(8) Average Total Unit Value
1973/74	82,844	$ 687,783	$ 8.30	$ 5.60	$ 463,926	$ 1,151,709	$13.90
1974/75	97,212	732,526	7.53	5.90	573,550	1,306,076	13.43
1975/76	110,649	898,000	8.11	6.21	687,130	1,585,130	14.32
1976/77	102,543	1,015,982	9.91	6.93	710,548	1,726,530	16.84
1977/78	93,756	1,090,828	11.63	9.40	881,343	1,972,171	21.03
1978/79	87,956	1,247,011	14.18	10.52	925,392	2,172,403	24.70
1979/80	97,535	1,192,995	12.23	10.00	975,015	2,168,010	22.23
1980/81	88,336	1,699,585	19.24	11.53	1,018,155	2,717,740	30.77
GROSS TOTAL	760,831	$8,564,710	$11.26	$ 8.20	$6,235,059	$14,799,769	$19.46

Total Additions (2) - Gifts = Volumes added by purchase
Total Expenditure ÷ Volumes added by purchase = Average cost/yr. (4)
Gifts x Average cost/yr. = Value of gifts
Total expenditure + Value of gifts = Total book expenditure (3)
(5) = (6) ÷ (2)
(7) = (3) + (6)
(8) = (4) + (5)

THE YEAR'S WORK
RESOURCES USED

Personnel

The Division was allocated personnel resources as follows:

Allocated Staff	[redacted]
Classified Staff (61 positions)	[redacted]
Associate Staff (18 positions)	
Adjustment of allocated personnel resources due to vacancies	[redacted]
Classified Staff	[redacted]
Net expenditures for appointed staff	[redacted]
Hourly assistance paid	[redacted]
TOTAL appointed staff and hourly assistance	[redacted]

Space

The Division was allocated work space 10,268 sq. ft. in excess of any Division activity which takes place outside of McKeldin.

Computer Support and Related Equipment

At the year's end the annual use rate for lease/maintenance of library-operated computer related equipment was as follows:

OCLC and peripherals	[redacted]

Operating Expenses

It is estimated that in excess of ~~$137,650~~ was used by the Division for operating expenses. This includes supplies, card stock and other forms, telephone costs and other expenses. This figures does not include any share of administrative expenses and overhead not specifically attributable to the Division. No data is available whereby Technical Services expenses are specifically identified, however, this figure does bear the same relationship to the Libraries' total operating expenses as did the Technical Services figure reported for FY 1980.

THE YEAR'S WORK--
BENEFIT/COST

The systems support is not available to the Division whereby management information is adequate to assess with any certainty either the benefits or the costs of the Division's work. Such costs as overhead, space, contributed management, peripheral uncharged computer support the allocation of charged computer support by library function and a standard unit of benefit value are not available because data is not adequately analyzed.

Nonetheless, an assessment of benefit or cost is largely meaningless when either is presented out of the context of the other. For that reason, and further, because adequate planning cannot take place without some guideline for unit costs for Technical Services, it is useful to establish some unit costs, even if it is but a rough approximation. Based on the notion of a benefit unit as one title, serial or monograph, newly added to the collections or one serial title maintained for the current subscription, prorated over known costs assignable to Technical Services, the benefit/cost ratio is as follows:

New titles cataloged	
Monographs	35,829
Serials	749
Serial titles currently received	19,697
Total benefit units	56,275
Personnel costs	[redacted]
Assignable computer and related equipment costs (OCLC included)	[redacted]
Operating expenses	[redacted]
Total known assignable Technical Services Cost	[redacted]

$$\frac{\text{Benefit Units}}{\text{Cost Units}} \quad \frac{\text{Monograph or serial titles added or serial titles maintained}}{\text{Known assignable Technical Services costs in dollars}}$$

$$\frac{56{,}275}{[redacted]} \qquad \frac{1}{[redacted]} \qquad \text{or} \qquad \frac{[redacted]}{\$1.00}$$

Based on the notion of a benefit unit as one library materials dollar processed, the benefit/cost ratio is as follows:

$$\frac{\text{Benefit Units}}{\text{Cost Units}} \quad \frac{\text{Library materials dollars processed}}{\text{Known assignable Technical Services costs}}$$

$$[redacted] \qquad \frac{[redacted]}{\$\ 1.00} \qquad \frac{\$1.00}{[redacted]}$$

UNIVERSITY OF KENTUCKY LIBRARIES

LEXINGTON KENTUCKY 40506-0039

OFFICE OF THE DIRECTOR
127 KING LIBRARY NORTH

TELE. (606) 257-3801
TWX 510-476-8816

November 30, 1982

MEMORANDUM

TO: Maxine Sitts, Office of Management Studies, ARL

FROM: John Bryant, Assistant Director for Technical Services

SUBJECT: Technical Service Division, University of Kentucky Libraries

The various attachments have been pulled together to give you some idea of the costs related to the Technical Service Division of the University of Kentucky Libraries. The first five attachments are the result of recent cost and computer related studies. The sixth being a cost study done in 1978 to determine the approximate cost of adding a title to the shelf as well as Technical Service Division costs for that year.

Technical Services serves the Main Library and eight branches. Excluded in all of the attachments are Technical Service related costs for Units doing their own Technical Service work, i.e. the Agriculture, and Law Libraries and Special Collections. In addition, there was no attempt in these studies to include those costs related to Technical Service functions which are done in the various units served, e.g. filing cards in the branches.

ATTACHMENT # 1
PROJECTED COST STUDY FOR TECHNICAL SERVICES FOR 1982/83

ATTACHMENTS # 2 & 3
TECHNICAL SERVICES UNIT ACTIVITIES, STATISTICS AND AUTOMATION DEVELOPMENTS TO DATE AND FUTURE NEEDS

ATTACHMENTS # 4 & 5
STAFF COSTS BY UNIT IN TECHNICAL SERVICES INCLUDED IN A PRIORITY INVENTORY FOR THE UNIVERSITY

ATTACHMENT # 6
TECHNICAL SERVICES COST STUDY DONE IN 1978 ~~WITH ACCOMPANYING STATISTICS FOR THE YEAR~~ (not included in list)

JMB:MP

Atts.

AN EQUAL OPPORTUNITY UNIVERSITY

ATTACHMENT # 1

UNIVERSITY OF KENTUCKY LIBRARIES

TECHNICAL SERVICE DIVISION PROJECTED COSTS FOR 82/83

THE ACQUISITIONS DEPARTMENT

SALARIES	$209,458
OCLC ACQUISITIONS SUB-SYSTEM: 1 Terminal operation cost, systems use and postage	$ 49,000*
SUPPLIES & ADDITIONAL POSTAGE	$ 7,000
PHONE & OTHER ITEMS IN THE CURRENT EXPENSE BUDGET	$ 3,000
	$258,458

*(Does not include the time Acquisitions Department uses additional terminals in the Cataloging Department. Those costs are included in the Cataloging statistics.)

THE CATALOGING DEPARTMENT

SALARIES	$255,822
OCLC CATALOGING SUBSYSTEM: 5 Terminal operation cost. System use and cards	$ 59,000
SUPPLIES	$ 7,000
PHONE AND OTHER ITEMS IN THE CURRENT EXPENSE BUDGET	$ 3,000
	$331,822

THE BINDERY

SALARIES	$ 23,420
SUPPLIES	$ 6,147
OTHER	$ 300
OUTSIDE BINDING COST	$ 80.000
	$109,867

TOTAL FOR TECHNICAL SERVICES: $700,147 (i.e. 13% of the total library)

TOTAL PROJECTED EXPENDITURE FOR THE LIBRARY FOR 82/83 is $5.2 MILLION

ATTACHMENT # 2

THE CATALOGING DEPARTMENT

The Cataloging Department is primarily responsible for preparing and maintaining accurate bibiliographic records for materials added to the Collections in King and the Branch Libraries. This unit coordinates planning and quality control with the Associate Libraires

This Department receives materials, i.e books, journals microform, A.V. etc. from the Acquisitions Department as well as from the Gift section of Collection Development.

I. As materials are received they are distributed to the appropriate units, in either the Monograph or serials areas.

II. The materials are searched on-line to determine availability and level of on-line records in the On-Line Computer Library Center to which we have a dedicated line. (Location Columbus, Ohio Materials with suitable records are edited on-line added to our own on-line data base, our symbol is attached for the total data base, cards are ordered and labels made all at the terminal.**

III. Materials without suitable records on-line are sent to the original catalogers to do the following:

- Describe the piece, i.e. Author title, publication place and date etc.
- Classify according to the Library of Congress Schedules.
- Authority of all entries are established, e.g for personal names, names of places, institutions etc. (Manual authority records are now made and maintained)
- This newly created record is put into the data base and the process from there is the same as those with suitable records (see above **)

IV. Cards are received, sorted for filing in the Public Catalog, or sent to the Branch Library. Cards are then manually filed into the card catalog. In addition to adding cards to the card catalog many updates, changes in entries for names, place institutions, subject heading are made manually as well as in the on-line data base. (Manual filing, updating, manual authority records could all be eliminated if we could have a local on-line catalog.)

I. Bindery (A separate Unit under the Cataloging Department) Materials i.e. Journals, paperbacks for binding, repair etc, are sent to the Binding Unit for either in house attention or to be sent out to our Commercial Binder. (The Commercial Binder maintains a computer data base for all of the titles that they bind. The Bindery Unit maintains cooresponding peper files for materials at the Com. Binder and those beng bound in house. (Automation implications: A local on-line circulation and serials control system would contain information about the binding status of materials whether in house or away.

CATALOGING DEPARTMENT 1981/82 (STATISTICAL DATA)

Sections I -III

This Department added 18,819 titles to the collection and to the data base last year. These materials include:

Monographs, serials/journals, microform & fiche and A.V.

Section IV

This function is basically done by the Catalog Maintenance Unit of the Department:

Cards Received from O.C.L.C.	164,650
Cards Filed in King Only	127,308
Cards pulled from the Catalog	7,312
Reclassification	486 title

Anglo American Cataloging Rules #2 implications:

Total staff hours:	2124
Problems	4190
Authority Cards	2096
Cross References	5111

I. Bindery:

Volumes Bound by Commercial Binder:	7,755
Volumes Bound in House:	2,116

ATTACHMENT # 3

ACQUISITIONS DEPARTMENT

Automated system in use: OCLC Acquisitions Subsystem

Features:

1. Access to online database of 8,000,000+ bibliographic records. We search this database to verify book and serial bibliographic information before ordering. Since this is the same database used in our cataloging operation, pre-order searching will detect items already in the library collection.

2. Ordering. OCLC is used to create purchase orders (for books and serials only) which are printed offline at the network center in Ohio and shipped from there to publishers and vendors. Orders are fulfilled directly to the library. Future OCLC plans include electronic transmission of orders from OCLC direct to vendors.

3. Invoice control. The OCLC order record is also used for recording date of receipt and invoice/DAV numbers.

4. Fund accounting. A fund module is part of the subsystem. Funds created by the library (we have over 100) are posted for encumberances and expenditures during the order/receipt process. Dynamic records of each fund are available online. Unfortunately, the subsystem does not have error detection capabilities and we must do extensive manual proofing for accuracy.

Unautomated acquisitions activities:

1. Claiming orders. The OCLC subsystem does not automatically alert us to non-receipt of materials ordered. We are presently maintaining a dated manual file to track orders for claiming.

2. Serials control. We maintain records for over 20,000 serials in a Kardex file. The cards for each title in this file are about 6" x 10". Four FTE check in over 40,000 serial issues per year, recording each piece in the Kardex file. The historical holdings, payment and binding records, and current holdings are all compressed into the file. Access is by title only and the records are <u>not</u> user-friendly. They are interpreted for patrons by library staff. Another problem is claiming missing issues. As a manual chore it requires constant file reading and letter writing. Since most serials have a defined frequency, claiming missing issues lends itself nicely to automation.

Summary:

The OCLC acquisitions subsystem is currently adequate for ordering purposes, although enhancements in claiming and fund accounting are certainly desirable. Since OCLC has promised developments in these areas in addition to complete integration of acquisitions and cataloging, we feel pretty good about our future with this system. We might, however, want to consider as an alternative acquisitions modules offered by turnkey system vendors--if the library selects one for a circulation system.

Serials control is by far our greatest automation need now. It also ranks as a high priority systemwide in that we desperately need better access to serials records not only for technical control but also for public service to patrons. There are now systems in the marketplace which offer online check in, automatic claiming, extensive management information reports, and remote access to records with user-friendly software and hardware. Since over half the library's materials budget is spent on serial publications, it seems justifiable to invest in systems that support internal control and external access to these materials.

STATISTICS FOR THE ACQUISITIONS

1981/82

Automated system:

1. Searching: On the new system to date we have searched and ordered 4,315 new orders. July 1,82-Oct.31,82

2. Ordering: Approximately 10,000 new orders were sent this past year. This does not include the nearly 21,000 standing orders for serials and monographs that are handled each year.

3. Invoices/ DAV

We do not have a count of Invoices handled or DAV's typed or generated on the computer last year. 81/82 invoices & DAV's are housed in in six file cabinet drawers.

Unautomated system:

1. Claiming orders: 1228 sent in 81/82

2. Serial issues: 47,316 were checked in in 1981/82

Other statistics which could be of interest for automation:

We prepare and send 23,705 pages of the Table of contents to the Faculty each year. This could be automated in a serials on-line check-in system.

ATTACHMENT # 4

Priorities Worksheet
University Library System
University of Kentucky
Lexington, Kentucky

October 28, 1982

☐ NEW PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

☒ EXISTING PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

Library: King Administrative Unit: T.S Cataloging

Library Programs, Activities, Products & Services	Priority Rank		Current Quality of Program, etc.*	Estimated Annual Cost	Recommended Action	Estimated Costs/Savings of Implementing Action
	Category	Numeric Within Category				
Monographs- Original Cataloging	A	1	Good	$76,840* Includes staff only 1/5+of E.v. Smith J. Robinson ½ of Bates	Materials are moving fairly well, with a relatively small backlog cosisting of rather esoteric materials such as Japanese and Slavic language. The quality of the original cataloging is excellent. Given the cost of creating original records and maintaining authority records as well as two catalog formats, it is very important to be selective when adding materials to the collection. The micro-form program is continuing but will require a large cooperative effort among research libraries to ever be completed. Bringing up an on-line catalog would certainly reduce the manual efforts generated by this program.	
Serials- Original cataloging and maintenance of serial titles and records	A	1	Good	$76,256 Includes staff only + 1/5 of E.V. Smith J. Robinson ½ Bates	Over 90% of this units effort goes towards serials related problems and maintenance as opposed to cataloging new materials. This unit is responsible for the bibliographic control of serials in the Main Catalog, CSR, and on-line. The conversion project has had impact on this unit as well as on Law & Agr. Automation could reduce the number of records now maintianed and give this library a far better serials control system. Excellent systems are starting to come up and our own in-house test of the new holdings format makes that aspect look very promising.	

* Program Quality Ratings: Excellent, Good, Fair, Unsatisfactory

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Priorities Worksheet
University Library System
University of Kentucky
Lexington, Kentucky

October 28, 1982

☐ NEW PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

☒ EXISTING PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

Library: King Administrative Unit: T.S. Cataloging

Page 2 of 3

Library Programs, Activities, Products & Services	Priority Rank		Current Quality of Program, etc.*	Estimated Annual Cost	Recommended Action	Estimated Costs/Savings of Implementing Action
	Category	Numeric Within Category				
On-Line Cataloging to include editing supplied cataloging and inputting of original cataloging	A	2	Good	Staff only $41,332 1/5 J. Robinson + Assistantship	Current materials are moving fairly well, but with some backlog. This unit is rather short of staff and depends upon student assistantships for much support. The slavic backlog is moving very slowly because of the priority we have had to place on those materials. A local on-line catalog with OCLC access would greatly reduce duplication of effort here. A totally intergrated system would be even more effective.	
Catalog Maintenance Filing	A	1	Fair	$61,754 Includes staff only + 1/5 of E.V. Smith J. Robinson and students	Reduced staff and AACRII have had a severe impact on this unit. We are advertising for an additional ½ time filer which will help, and we are using other cataloging staff to help file. Bringing up and on-line catalog would dramatically change the function and certainly the work load here.	
On-Line Maintenance	B	2	Good	" "	This program which is anticipating on-line access to our local data base and other related products. While not absolutely necessary now, it will be critical for the near future. Action would certainly be and on-line catalog.	
Authority control	B	2	Good	" "	Manual files and the catalogs serviced by central cataloging, reflect uniformity of entry. An on-line catalog with Authority would greatly reduce the effort here, and increase the quality of service to the units served.	

* Program Quality Ratings: Excellent, Good, Fair, Unsatisfactory

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Priorities Worksheet
University Library System
University of Kentucky
Lexington, Kentucky

October 28, 1982

☐ NEW PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

☒ EXISTING PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

Library: King Administrative Unit: T.S. Cataloging
Page 3 of 3

Library Programs, Activities, Products & Services	Priority Rank		Current Quality of Program, etc.*	Estimated Annual Cost	Recommended Action	Estimated Costs/Savings of Implementing Action
	Category	Numeric Within Category				
Catalog Maintenance (Continued) AACR-II Implementation	B	1	Excellent	See page 2 for cost for Cat. Maint.	The conformity to AACR II and L.C. interpretation as well as network requirements is strickly adhered to. An on-line catalog would improve this program very much.	
Discarding - correcting and changing entries and labelling	A	5	Good	" "	Many manual as well as on-line steps are required for this. Again an on line system would do wonders for this effort.	
Bindery	A	3	Fair	23,420 Includes Staff only + 1/5 E.V. Smith Robinson & ~~students~~ J.	Could possibly take on a more positive preservation role, but with only two staff members and the amount of in-house binding as well as handling of outgoing binding this is not feasible now. An on-line system would make the binding status of materials far more accessible.	
TITLE II C	B	1	Good	N/A	A serials conversion project that has enabled UK to convert thousands of additional titles into our data base as well as OCLC. Holding enhancement may be funded next year.	

* Program Quality Ratings: Excellent, Good, Fair, Unsatisfactory

ATTACHMENT # 5

Priorities Worksheet
University Library System
University of Kentucky
Lexington, Kentucky

October 28, 1982

☐ NEW PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

☒ EXISTING PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

Library: King Administrative Unit: T.S. Acquisitions

Page 1 of 2

Library Programs, Activities, Products & Services	Priority Rank		Current Quality of Program, etc.*	Estimated Annual Cost	Recommended Action	Estimated Costs/Savings of Implementing Action
	Category	Numeric Within Category				
Pre-ordering searching and ordering	A	1	Good	$80,221 Staff only + 1/3	More support could be given to collection development with increase in searching staff. Present staff are doing all they can.	
Receiving	A	1	Good	G. Kennedy Alan students	Staff is keeping up with daily incoming mail but problems tend to accumulate before adequate attention can be given. Rely very heavily on students--who are not able to manage problems. Also handicapped staff member is limited in what he can do--other staff constantly compensate.	
Bookkeeping and invoice payment	A	1	Fair	Staff only $43,112 + 1/3 Gail- Alan & students	Most heavily affected area of acquisitions by new system staffing level is adequate (with heavy reliance on students) just needs more experience.	
Serials check-in (including newspapers and monograph standing orders)	A	1	Good	$84,940 Staff only + 1/3 Gail	Serials control is in serious need of automation. Four FTE cannot successfully manage over 17,000 active titles. Additional staff would help handle the workload, but an automated system would have additional benefits for the public service areas in King and branches.	
				Alan & Students		

* Program Quality Ratings: Excellent, Good, Fair, Unsatisfactory

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Priorities Worksheet
University Library System
University of Kentucky
Lexington, Kentucky

October 28, 1982

☐ NEW PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

☒ EXISTING PROGRAMS, ACTIVITIES, PRODUCTS & SERVICES

Library: King Administrative Unit: T.S. Acquisitions

Page 2 of 2

Library Programs, Activities, Products & Services	Priority Rank		Current Quality of Program, etc.*	Estimated Annual Cost	Recommended Action	Estimated Costs/Savings of Implementing Action
	Category	Numeric Within Category				
Serials claiming (including monograph standing orders)	A	5	Fair	See page 1 for cost	Although this job is essential to a strong serials collection--and a financially important responsibility, it always takes second priority to the incoming workload. Again--automation is the only real solution to the dilemma.	
Table of Contents Service	B	3	Good	Cost included in CSR. + $1,185 for copies	The procedures for this are cumbersome and unsophisticated. Hopefully it can be automated through a serials control system.	
Journal Routing Project (to library staff)	C	2	Good	$700 for duplication staff time minimal	Again--automate!	

* Program Quality Ratings: Excellent, Good, Fair, Unsatisfactory

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ATTACHMENT # 6

UNIVERSITY OF KENTUCKY LIBRARIES

LEXINGTON, KENTUCKY 40506

OFFICE OF THE DIRECTOR

TELE. (606) 257-3801
TWX 510—476-8816

August 30, 1978

M E M O R A N D U M

TO: Paul A. Willis, Director of Libraries

FROM: John M. Bryant, Assistant Director for Technical Services

SUBJECT: Technical Services Statistics

For your information I have compiled some relevant statistics for the Technical Services Division for the fiscal year 1977/78. Sheets similar to the attached will appear this year with the monthly reports.

Our total library expenditures, not to include any building, heat, or light, for FY 1977/78 was $3,339,726. The central Technical Services Division accounted for approximately $493,699 of this amount or 15% of the total expenditure. Technical Services added 30,313 titles to the collection. Factoring out approximately $60,000 in service non related to processing new titles and Solinet support to associate libraries, It cost this library $14.31 to select, order, and supply full cataloging and cards for each title. Our BATAB statistical module has been run and it shows an average cost of mono-serial titles of $16.75 for King and the branches, excluding Agriculture, Biological Sciences, and Law. This gives us an approximate cost of $30.87 to add a title to our collection.

The method of computing the costs given above is rather simple but I am sure had the most sophisticated method of computation been applied it would not change the dollar figures or the percentage significantly.

This study does not include any other Technical Services efforts in the system.

We will soon do a new run of our BATAB statistical module which will supply us with much information such as: indicate vendor service, processing time through all of Technical Services, and direct order time in relation to vendor.

JMB:pab

Attachments

AN EQUAL OPPORTUNITY UNIVERSITY

The Research Libraries Group

RLG/BIBPAC-76/0001
May 26, 1976

Statement of Desired Data for Determining The Costs of Maintaining RLG Catalogs 1976/77

Bibliographic Processes and Control Committee

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COLUMBIA UNIVERSITY LIBRARY · HARVARD UNIVERSITY LIBRARY
THE NEW YORK PUBLIC LIBRARY · YALE UNIVERSITY LIBRARY

I. Introduction

From July 1, 1976, the Bibliographic Processes and Control Committee of RLG intends to collect the following data according to the attached set of definitions. Our desire is to achieve uniform data, comparable over time between units within RLG, that will be useful for management within each library. The attached material therefore comprises a set of recommendations for the coming fiscal year to those responsible for the various RLG cataloging units. Each unit will of course continue to collect other data in whatever form it desires for its own purposes.

Our intent is to gather data in order to analyze cataloging trends over extended periods of time, particularly over the next few years as RLG co-operative activity should begin affecting costs and productivity within each institution. It will be evident that considerably more data could be gathered than is described on the following pages. The Committee felt, however, that the initiation of new data-gathering procedures should be evolutionary, with certain data elements set aside for consideration at a later time.

We recognize that the collected data could be used for comparisons between RLG institutions, and between RLG and other major libraries; however, it is our view that such comparison cannot depend only on the data described below if conclusions are to be of any value. In any case it is not primarily for such a purpose that this data will be collected. Its greatest use will be in reflecting trends within RLG cataloging that are initiated or controlled by joint RLG activity, and in supplying uniform data to the managers who best know their own institutions and how to improve the services offered by them.

The present recommendations pertain primarily to data associated with cataloging. Thus in general data exclusively or primarily relating to other activities, such as acquisition, public service, and the like, are not treated below and should not be included.

II. Desiderata

A. Number of Titles Cataloged: The following table illustrates what is desired. All materials cataloged are to be counted in this and the following tables, whether book, book-like or non-book.

Type of Cataloging	NEW TITLE CATALOGING SOURCE		OTHER CATALOGING
	Original	Copy	
Monograph			
Serial			

TABLE I: Number of Titles Cataloged

Note that "Other Cataloging" comprises recataloging, reclassification and added-copy work.

See the definitions in Section III, below, for further detail.

Title counts are to be recorded at some point between cataloging and end processing.

B. Labor-cost figures for specified phases of cataloging activity, broken down where possible by type of material and type of cataloging, and in all cases by staff level. Note that "Aggregate Salary Costs" should include fringe benefit costs (see II.C.3 below).

SEE ALTERNATIVE PAGE 3, FOLLOWING

II. Desiderata

A. Number of Titles Cataloged: The following table illustrates what is desired:

TABLE I

Form of Material	Type of Cataloging	NEW TITLE CATALOGING SOURCE: Original	Modified	Copy: LC	Other	OTHER CATALOGING: Recat.	Reclass.	Added Copies	TOTAL
BOOK AND BOOK-LIKE (including microforms)	Monograph								
	Serial								
NON-BOOK	Monograph								
	Serial								

DRAFT

Non-book materials include: sheet maps, pictures, recordings, motion picture loops, video tapes, slides, aperture cards, film strips, cassettes, computer tapes, manuscripts, theatre prompt-books, and the like.

See attached definitions for further detail.

* (The point at which the count is to be made is a matter for discussion.)

B. Labor-cost figures for specified phases of cataloging activity, broken down where possible by type of material and type of cataloging, and in all cases by staff level. Note that "Aggregate Salary Costs" should include fringe benefit costs (see II.C.3 below).

SEE ALTERNATIVE PAGE 3, PRECEDING

1. Copy Source Maintenance

	Number of FTEs	Aggregate Salary Costs 1976/77
Cataloging Staff III		
Cataloging Staff II		
Cataloging Staff I		
Totals		

2. Catalog Maintenance

Cataloging Staff III		
Cataloging Staff II		
Cataloging Staff I		
Totals		

3. IPF Maintenance

Cataloging Staff III		
Cataloging Staff II		
Cataloging Staff I		
Totals		

4. Pre-cataloging Search

Cataloging Staff III		
Cataloging Staff II		
Cataloging Staff I		
Totals		

5. Cataloging

	Number of FTEs	Aggregate Salary Costs 1976/77
1. Monograph		
Original		
CS III		
CS II		
CS I		
Copy		
CS III		
CS II		
CS I		
Recat., Reclass., Added Copies		
CS III		
CS II		
CS I		
2. Serial		
Original		
CS III		
CS II		
CS I		
Copy		
CS III		
CS II		
CS I		
Recat., Reclass., Added Copies		
CS III		
CS II		
CS I		

SEE ALTERNATIVE PAGE 5, FOLLOWING

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5. Cataloging

A. Book and Book-like Materials

1. Monograph	Number of FTEs	Aggregate Salary Costs 1976/77
NEW WORK		
Original		
CS III		
CS II		
CS I		
Modified		
CS III		
CS II		
CS I		
Copy		
CS III		
CS II		
CS I		
OTHER CATALOGING: Recat., Reclass., Added Copies		
CS III		
CS II		
CS I		

2. Serial

DRAFT

	Number of FTEs	Aggregate Salary Costs 1976/77
NEW WORK		
Original		
CS III		
CS II		
CS I		
Modified		
CS III		
CS II		
CS I		
Copy		
CS III		
CS II		
CS I		
OTHER CATALOGING: Recat., Reclass., Added Copies		
CS III		
CS II		
CS I		

SEE ALTERNATIVE PAGE 5, PRECEDING

6. End-processing (card) Total number of cards produced _____

	Number of FTEs	Aggregate Salary Costs 1976/7
Cataloging Staff III	_____	_____
Cataloging Staff II	_____	_____
Cataloging Staff I	_____	_____
Totals	_____	_____

7. Arranging and Filing Total cards filed _____

	Number of FTEs	Aggregate Salary Costs 1976/77
Cataloging Staff III	_____	_____
Cataloging Staff II	_____	_____
Cataloging Staff I	_____	_____
Totals	_____	_____

C. Other Data

In this category are data which can be established simply by reporting local practice.

1. Work time

a. Length of work week: _____ hours

b. Number of paid hours in year: (=1.a. times 52): _____ hours

c. Number of productive hours in year (1.b less average sick leave, vacations, holidays; do not subtract break time): _____ hours

2. Fringe benefit rates for staff levels:

Cataloging Staff III: _____%

Cataloging Staff II: _____%

Cataloging Staff I: _____%

SEE ALTERNATIVE PAGE 6, FOLLOWING

III. Definitions

Though some of the following definitions of cataloging activities may differ from those used locally, they should be used for the reporting of statistics for RLG purposes. However, questions that arise about matters not discussed below should be resolved in accordance with local policy.

A. Personnel:

1. FTE (Full-Time Equivalent) Definition: Our interest here is in the number of filled full-time positions. Do not include positions which were unfilled, though budgeted. A person working full-time for six months of the year is one-half (or .5) of an FTE; so is a person working half-time for the full year. You may wish to round up or down to the nearest .25 of an FTE according to your judgment of the importance of accounting for the specific cost. Thus a person working full-time for 7 1/2 months on a particular project might be .5, .625 or .75 of an FTE charged to that project. FTEs are summed, not people; thus two persons each working half-time for a year are one FTE, not two.

2. Staff Definitions: BIBPAC has agreed that for the purposes of the study of cataloging costs it is desirable to consider personnel in three broad categories. It seems useful to speak of Cataloging Staff with levels distinguished only as I, II and III, with the higher number, as usual, indicating greater responsibilities. The staff levels are given below with the presently appropriate staff ranks shown for each institution.

Cataloging Staff III	
Columbia	Professional, ranks I-V
Harvard	Librarian, ranks I-III; Exempt (or "other officers")
NYPL	Librarian, ranks I-X; Specialists I-IV; Administrative Associate
Yale	Librarian, ranks I-V
Cataloging Staff II	
Columbia	Bibliographic Assistant IV-VI; Library Assistant IV-VI; all SCATs; GA/BA
Harvard	Library Intern; Library Assistant III-V; Secretary II, III; Technical Typist
NYPL	Library Technical Assistant I-IV, Administrative Assistant
Yale	Technical Services Specialist, Library Specialist; Senior Library Specialist; Subject and Language Specialist; Administrative Assistant
Cataloging Staff I	
Columbia	General Assistant; Clerical Assistant I-III, Technical Assistant I-III
Harvard	Library Assistant I-II; Typist II; Secretary I; Clerk Typist II; Students and Casuals
NYPL	Library Clerical Assistant
Yale	Technical Services Assistant; Secretary A, B; Clerk Typist; Senior Clerk

B. Counting Basis: The unit counting basis for these procedures is title, not piece, unless otherwise stated.

C. Sources of Catalog Copy--Definitions

1. Copy: Copy cataloging is cataloging performed with copy which is already available from another cataloging source, for example LC or NUC, and which needs only minor modification, if any, for local use. Where an institution provides for an intermediate source of cataloging (e.g. "Modified LC") it should count such work in this category, "copy" cataloging.

2. Original: Original cataloging is performed by the cataloger with little or no data supplied from another cataloging source.

D. Recataloging and Reclassification: Reclassification is typically a matter only of changing the call number, whether for transfer or other purposes, often attendant upon changing the location of the item.

Recataloging will often involve substantially more effort and will call for replacing one set of cards (or entries) with another. Replacing missing or broken cards does not fall here. If a title is both reclassed and recataloged it should only be counted once as recataloging.

Serials which are "recataloged" because their title has changed, i.e. the old cards are closed and new cards under the new title entered, are to be counted as new titles, not as recataloged titles.

E. Added copies: Include replacement copies, and "copy in a new department," here.

Note: The three preceding activities listed as D. and E. may be considered to be "other work," or "other cataloging," while the activities associated with new titles can be called "new work" or "new cataloging."

F. Materials: Data is to be gathered on cataloging of all forms of material, including such items as sheet maps, recordings, pictures, videotapes, film strips and loops, slides, aperture cards, realia, manuscripts, theatre prompt-books, music scores, books, journals and microforms, and the like. All of these can normally be classified as to source of cataloging (copy or original) and type of cataloging (monograph or serial).

G. Monographs and Serials:

1. Monographs: Includes portfolios, paperbacks, pamphlets and off-prints. Includes monograph continuations (including handbooks, dictionaries, etc. which are issued in unbound parts). Analytics are to be counted here. Included as analytic work is the provision of sets of cards (or at least a main card) for work appearing in larger works. These are usually titles in classed-together sets

or serials, and can be parts of volumes which have bibliographic identity. When the larger work, i.e. the set or serial, is cataloged it will be counted as monograph or serial; each time an analytic is made for an item in that set or serial it will be counted again here as a monograph. The first volume cataloged in such a set or serial would, therefore, be counted twice, but this will in fact reflect two forms of cataloging activity.

2. Serials: Included here are those items included in the AACR definitions for Serials (including Monographic Series), Periodicals, and Newspapers.

H. Cataloging Activities--Descriptions

Descriptions are provided below, under the subheads by which they are divided in Section II above, of activities for which costs are desired. Unless otherwise indicated, only labor costs (including fringe benefits) are desired; materiel, space, and overhead costs, for example, are not to be included. The year in question will be July 1976 through June 1977.

The descriptions are not ordered by priority or in any other way within the subheading. Nor are they meant to schematically divide the subhead activity; overlapping of activity may occur within the descriptions.

Not all activities will occur in a given institution, and if they do, they may be so marginal as not to merit attention. Attempts should not be made to find data for an activity if its existence is not so well known as to spring readily to mind. On the other hand, if a substantial activity contributing to cataloging is not listed, it should be specially noted.

In general, inclusion of relevant costs in the study is more important than their precise placement.

1. Copy Source Maintenance

   1. Arranging, filing and purging of LC Depository and LC proof slip files.

   2. Any handling of MCRS or other micro-source data. Do not include costs of purchase, handling or storage of NUC or other book catalogs. Where their use is solely for cataloging purposes their cost may be charged under H.9 Materiel.

2. Catalog Maintenance

   1. Replacement of worn or mutilated cards.

   2. Replacement of missing cards, and related work.

   3. Correction of incorrect entries and changed entries. By changes is meant changes to headings affecting many entries, for example LC subject heading changes; work arising out of individual titles, and affecting few records, will fall under H.5 Cataloging.

   4. Adjustment of the work of staff members to whom the adjustment cannot be assigned; carrying out of a responsibility in a subject or language area; carrying out an unusually long adjustment which stems only remotely from a title presently being cataloged.

5. Shifting of drawers and cards within drawers (small-scale).

6. Shifting of drawers and cards within drawers (large-scale); be sure to mention in a note if this activity is performed on a large scale in 1976/77.

Do not include authority work, which is to be placed under H.5 Cataloging.

3. IPF (In-Process File) Maintenance

That portion of IPF maintenance performed by and for the cataloging operation should be accounted for here. Acquisition or public service operations should here be ignored.

1. Arranging and filing of any forms into IPF.

2. Updating and maintenance of entries in IPF.

3. Purging of record from IPF when notification is received that the title is processed and ready for circulation.

Do not include costs attributable to automation (e.g. MATPS).
Do not include costs incurred by units other than cataloging (e.g. acquisitions).

4. Pre-cataloging Search

Charge here the cost of searching done by staff specifically assigned to this task. The cost of searching done by catalogers in the course of their cataloging work should be included in H.5 Cataloging, below.

1. Hard-copy search: searching for cataloging copy, or to verify bibliographic information, or to check against duplication, in any of the following or similar sources: LC Depository, proof slip file, local catalog, NUC, MCRS. Include time to photograph NUC copy but not cost of camera or of photo processing.

2. Terminal search: searching of a data base conducted at a terminal, e.g. of OCLC or of RLG/LC.

3. Ordering of LC cards for specific titles (do not include cost of cards here).

Costs should be charged here only when the search is conducted with the item in hand.

5. Cataloging

1. Authority work: establishment and maintenance of authority entries arising out of work with individual titles, and affecting only a limited number of records (for changes affecting many records, see H.2. Catalog Maintenance).

2. Searching done by a cataloger, either a) as re-searching a previously searched item, or b) when no staff has been specifically assigned to searching and it is normally the cataloger's responsibility.

3. All cataloging activities as traditionally defined, whether the cataloging source is original, modified or copy: monograph, serial, or analytic; descriptive cataloging, subject analysis, or classification.

4. Recataloging and reclassification.

5. Cataloging activity associated with added copies.

6. Revision of cataloging.

7. Cataloging activity up to and including the creation of the first local exemplar, in whatever form, which represents the ultimate catalog entry.

8. Preparation of that first exemplar for keyboarding into an automated system, e.g. tagging fields for MARC requirements.

9. Searching, locating and entering data at an OCLC or RLG terminal when done by a cataloger, i.e. that activity leading up to and including the pressing of the "produce" key.

Keyboarding of worksheet data, whether for entry into a book catalog or a terminal system, is not included here unless done by a cataloger integrally with the intellectual process of cataloging. Other keyboarding should be included under H.6 End-processing (card).

6. End-processing (card)

Include here the activity to produce the actual catalog entries from the exemplar created by the cataloger.

1. Typing of complete card sets.

2. Typing of master cards.

3. Reproduction of card sets.

4. Revision of typing and of reproduction.

5. Time spent on maintenance of reproduction equipment if done by library staff.

6. Other time associated with reproduction: e.g. sorting, cutting.

7. Add-on typing on reproduced cards, e.g. added entries, call numbers, subject headings.

8. Stamping to indicate other holdings, etc.

9. Preparation of authority cards and of cross-reference cards if not performed by the cataloger.

10. Keyboarding of worksheet data for entry into a book catalog or a terminal system, when done after the creation activity by a person other than the cataloger who created the data.

7. Arranging and Filing

1. Arranging of cards in order in which they will be filed, by catalog into which they will be filed: shelf list, public catalog, official catalog, etc. All sorting and alphabetization is included here.

2. Receipt and checking of pre-arranged card lots (e.g. from OCLC or RLG).

3. Filing of cards in their respective catalogs.

4. Revision of filing.

8. Automation

A data-gathering form for this heading was not included above in section II.B as it will vary considerably from institution to institution. The descriptions given below are for guidance as to what data will be collected.

1. Costs of OCLC/NELINET/RLG activity: FTUs, dues, line charges, terminal amortization, and the like. As usual, do not include any amounts for space.

2. Costs of book-catalog production: include here activities starting after the keyboarding of data (see sections H.5 and H.6) up to and including the production of the master copy for printing by the photo-composing operation. Broadly there will be three sub-categories of cost here:

   a. MARC file maintenance;

   b. Input costs: processing of keyboarded data, editing, production of proofsheets, correction entries, etc.;

   c. Output costs: production of tape for photo-composition and the photo-composition cost itself.

Not included here are the costs of printing, binding and distribution of the physical books.

9. Materiel

1. Catalog card stock.

2. Book-catalog printing, binding, and other production costs post creation of master copy for printing.

3. Card cabinets

4. Cameras and processing costs of photographing NUC data, etc.

5. MCRS subscription.

6. LC cards specially ordered.

7. NUC subscription (for the year) where used solely by and for the cataloging operation. Where usage is shared with other library functions (e.g. reader services) this item will not be included here.

Entries in this heading will be provided by RLG staff in consultation with library staff; the descriptions above are provided for guidance only.

BOTTOM - UP STUDIES

Technical Services Division Work Assignment/Staffing Profile

Washington State University Libraries
Pullman, Washington 99164

Tasks or Processes	Average Number of Items Received for Processing	Average Time per Item	Average Number of Items Processed	Staff Hours Needed per Task	Level of Staff	Total Staff Hours Available at Designated Level	Additional Staff Hours Needed at Designated Level	Summary Total Staff Hours Currently Available	Summary Total Staff Hours Currently Needed
Bibliographic Verification									
Sorting form approvals.	3,400/mo (sorted but not all processed)	15 items/ min	900/hr	3.8/mo	Time slip	3.8/mo	-0-	Time slip 160/mo	Time slip 393.8/mo
Preparation of forms (folding, stapling, etc.)	2,300/mo	1 min/item	60/hr	38/mo	Time slip	38/mo	-0-		
Shelving materials.	2,400/mo	1 min/item	60/hr	40/mo	Time slip	40/mo	-0-		
Duplication/availability search.	3,600/mo	8 min/item	7.5/hr	480/mo	Time slip	86.2/mo	393.8/mo		
Preparation of book approvals includes - matching book ag. invoice, adding account numbers, accessioning.	700/mo	10 min/item	6/hr	116.6/mo	LT I	116.6/mo	-0-	(3)LT I's 472.5/mo	336.1/mo
Series Search.	1,483/mo	8 min/item	7.5/hr	197/mo	LT I	197/mo	-0-		
Initial cataloging search.	3,600/mo: 3,217	2 min/item	30/hr	120/mo } 375/mo	LT I	158.9/mo	216.1/mo		
	383	40 min/item	1.5/hr	255/mo					
Periodic cataloging search.	2,400/mo	2 min/item	30/hr	80/mo	LT I	-0-	80/mo		
Final cataloging search.	820/mo: 100 original	40 min/item	1.5/hr	66.6/mo	LT II	66.6/mo	-0-	LT II 157.5/mo	196.2/mo
	720	5 min/item	12/hr	60/mo	LT III	60/mo			

Washington State University Library
Pullman, Washington 99164

Unit: Bibliographic Verification

Tasks or Processes	Average Number of Items Received for Processing	Average Time per Item	Average Number of Items Processed	Staff Hours Needed per Task	Level of Staff	Total Staff Hours Available at Designated Level	Additional Staff Hours Needed at Designated Level	Summary Total Staff Hours Currently Available	Summary Total Staff Hours Currently Needed
Revision of final cataloging search.	100/mo	5 min/item	12/hr	8.3/mo	LT III	8.3/mo	-0-	(3) LT II 472.5/mo	-0-
Creation interim records (except gifts).	1,130/mo: 630	5 min/item	12/hr	52.5/mo	LT II	52.5/mo	-0-		
	500	10 min/item	6/hr	83.3/mo	LT III	83.3/mo	-0-		
Acquisitions data entry.	1,020/mo	3 min/item	20/hr	51/mo	LT II	51/mo	12.6/mo		
Initial revision.	3,600/mo	2 min/item	30/hr	120/mo	LT III	120/mo	-0-		
Final revision.	2,040/mo	2 min/item	30/hr	68/mo	Sup II	68/mo	-0-	Sup II 157.5/mo	-0-
Problem order search.	210/mo	10 min/item	6/hr	35/mo	LT III	35/mo	-0-		
Problem order revision.	100/mo	6 min/item	10/hr	10/mo	Sup II	10/mo	-0-		
Processing reinstates.	20/mo	15 min/item	4/hr	5/mo	LT II	-0-	5/mo		
Processing gifts. (Includes create interim records.)	170/mo	15 min/item	4/hr	42.5/mo	LT II	-0-	42.5/mo		
Processing FAST-CAT.	80/mo	12 min/item	5/hr	16/mo	LT II	-0-	16/mo		
Maintain Publisher's File.	NA	NA	NA	40/mo	LT I	-0-	40/mo		
Retrieving RUSH requests.	60/mo	60 min/item	1/hr	60/mo	LT II		60/mo		
Supervision	NA	NA	NA	255.4/mo	(2) LT	165.9/mo	-0-		
					Sup II	89.5/mo	-0-		

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November 1978

Technical Services Division Work Assignment/Staffing Profile

Washington State University Libraries
Pullman, Washington 99164

Unit: Cataloging and Book Processing
Subunit: LC Copy Editing

Tasks or Processes	Average Number of Items Received for Processing	Average Time per Item	Average Number of Items Processed	Staff Hours Needed per Task	Level of Staff	Total Staff Hours Available at Designated Level	Additional Staff Hours Needed at Designated Level
Order card sets-check item against data base, enter holdings	2100/mo(monos)	6 min/item	10/hr	210/mo	LT I LT II	124.1 85.9	
	63/mo(serials)	6 min/item	10/hr	6.3/mo	LT III	6.3	
Prepare worksheets	210/mo	10 min/item	6/hr	35/mo	LT I LT II	17.5 17.5	
Prepare TSD series cards	126/mo	2 min/item	30/hr	4.2/mo	LT I	4.2	
Do series check	350/mo	2 min/item	30/hr	11.7/mo	LT I	11.7	
Update CIP records	134/mo	10 min/item	6/hr	22.3/mo	LT II	22.3	
Input original cataloging data	210/mo(mono) 21/mo(serials)	25 min/item 25 min/item	2.4/hr 2.4/hr	87.5/mo 8.75/mo	LT II LT III	87.5 8.75	
Process "RUSH" monographs	168/mo	15 min/item	4/hr	42/mo	LT II	42	
Process corrections - data base information	360/mo	10 min/item	6/hr	60/mo	LT II Sup II	30 30	
Receive materials - sort series	2100/mo	3 items/min	180/hr	11.6/mo	LT II	11.6	
Resolve problems; locate materials	NA	NA	NA	31.2/mo	LT II LT III	18.6 13	
Prepare and sort series decisions materials	168/mo	8 min/item	7.5/hr	22.4/mo	LT III	22.4	
Sort mail	NA	NA	NA	42/mo	LT III	42	

Summary

Total Staff Hours Currently Available	Needed
LT I	
157.5	-0-
(2) LT II	
315	-0-
LT III	
157.5	-0-
	46
Sup II	
157.5	-0-

November, 1978

Technical Services Division Work Assignment/Staffing Profile

Washington State University Libraries
Pullman, Washington 99164

Unit: Bibliographic Verification Backlog

Tasks or Processes	Number of Items Awaiting Processing	Average Time per Item	Average Number of Items Processed	Staff Hours Needed per Task	Level of Staff	Summary Total Staff Hours Currently Needed	Proposed Method to Eliminate Backlog
1. Monographs in series. (duplication/cataloging search)	500	10 min/item	6/hr	83 a) 8 hr/day 10 days b) 4 hr/day 20 days	LT I	Time Slip 450	1) Assign Sherie Stoney and Rosemary Dixon to assist in Searching Unit for 2 or 3 months.(1 1/2 floater positions.
2. Create Interim Records (order)	750	10 min/item	6/hr	125	LT I or II		2) Add 160 time slip hours to work on backlog. (Per month)
3. Final cataloging search for release to original 5 per shelf x 100 shelves	500	40 min/item	1.5/hr	333	LT I or II		3) Adjust permanent staff workload appropriately.
4. Form Approvals.							
a) Preparation of forms	2,000	1 min/item	60/hr	33.3	Time Slip	LT I or II	
b) Duplication search (A/T & Title Index)		8 min/item	7.5/hr	266.0	Time Slip	919.6	
c) Series search	1,000		7.5/hr	133.3	Time Slip		
d) Initial cataloging search.	2,000	2 min/item	30/hr	66.6	LT I		
e) Interim Records	750(est.)	10 min/item	6/hr	125	LT I or II		
5. Process Reinstates (partial processing)	100	8 min/item	7.5/hr	13.3	Time Slip		
6. Processing Gifts.	750	15 min/item	4/hr	187 or 24 work days (approx. one month)	LT I or II		

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FUNCTIONAL UNIT OR AREA TSD Serials Unit

Washington State University Libraries
Pullman, Washington 99164

	Complexity of Task					
	Simple	Routine	Complex	Highly Complex	Professional	
1. Pull cards; file temps/cards	X					
2. Prepare, sort, and receive series decision materials	X					
3. Type temps	X					
4. Type abstracts		X				
5. Input original cataloging into WLN (monographs and serials)		(X)				
6. Update/correct data base records (monographs and serials)						
a. Following instructions of cataloguer			(X)			
b. Without cataloguer's instructions (adding DAT, COL, and FFR fields, correcting MARC tags in existing fields)				(X)		
7. Search data base for serials and monographs			(X)			
8. Search bibliographic tools for serials and monographs			X	X		
9. Create interim records in WLN		(X)				
10. Order card sets and attach call numbers		(X)				
11. Tag serials cataloging copy				X	X	
12. Maintain bibliographic tools area	X					
13. Original cataloging for monographs and serials (includes description, choice of access points, and MARC tagging)					(X)	
14 Provide instruction for updating/correcting data base records (monographs and serials)--adding all fields except DAT, COL, and FFD, plus any complicated corrections					X	

FUNCTIONAL UNIT OR AREA [illegible]

Washington State University Libraries
Pullman, Washington 99164

	Complexity of Task					
	Simple	Routine	Complex	Highly Complex	Professional	
A. Binding						
1. Sort as to type of binding needed; prepare/pack for shipping	X	X				
2. Prepare statistical sheets			X			
3. Unpack & pull binding slips		X				
4. Verification of binding; bar-code; price			X			
B. Marking						
1. Keypunch book cards, snags, book fine cards			X			
2. Verify keypunching			X			
3. Pre-processing (preparation for marking)		X	X			
4. Type cards and/or labels		X				
5. Double-check typing		X				
6. Affix labels, bar-codes, tattle-tape pocket & card; stamp due date	X					
7. Sort for distribution		X				
C. Compact storage						
1. Prepare for compact storage (pulling, typing, filing)		X	X			
2. Size, label, and shelve	X	X				
D. Other						
1. Bar-code production*				(X)		
2. Special handling items (microforms, etc.)		X	X			
3. Thesis editing*			X	X		
4. Sort & distribute mail	X	X				

* Also performed by Supervisor

FUNCTION, UNIT OR AREA Serial Record

Washington State University Libraries
Pullman, Washington 99164

	Complexity of Task					
	Simple	Routine	Complex	Highly Complex	Professional	
A. Binding						
1. Pulling & collation for:						
a. simple binding		X				
b. complex binding			X			
2. Typing of binding instructions	X					
B. Set ups & changes						
1. Provide instructions*				X		
2. Set up new titles			X			
3. Process changes			X			
4. Process other adjustment						
a. Simple		X				
b. complex			X			
5. Maintenance of LIST OF JOURNALS						
a. Preparation			X			
b. Input	(X)					
C. Revision; Decisions						
1. Revision*			X	X	X	
2. Route for decisions		X	X			
3. Decisions (including binding, retention, setting up, placement of standing order, compact storage)*				X	X	
4. Receive, sort, and prepare decision boxes		X				
D. Kardex work						
1. Checking in of material		X	X			
2. Added vols; class sep/analyzed titles; transmittals		X				
3. Claiming and abstracting		X	X			
4. Reconciliation of Purchase Request with Serial Record			X			
5. Search for document call nos.		X	X	X		

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* Also performed by a Supervisor

CORNELL UNIVERSITY LIBRARIES

MEMORANDUM

Date: September 15, 1980

To: Ryburn M. Ross

From: Jeffrey S. Cassidy JC

Subject: Cost study of the Central Technical Services Department

This summer I performed a cost study of the Central Technical Services Department of Olin Library at Cornell. It was done to determine how much to charge the Hotel and ILR libraries on campus for having the Technical Services Department handle their monographs and serials. Cost figures were updated for the Acquisitions and Cataloging departments and a figure was developed for the first time for the Serials department.

Along with new cost figures I determined a new Productive Time Ratio (PTR). The PTR is equal to (Total hours of productive labor/Total hours paid for). It is used to compensate for non-productive work time in the costs. In 1974 a PTR of .548 was observed. However, this summer I arrived at a figure of .610. The Compensating Factor (i.e., the percentage of the direct labor cost added to account for non-productive time) is equal to (1/PTR)-1. In 1974 the Compensating Factor was .845 and the present figure is .639. This lower figure helped to keep down the prices Olin will be charging since a smaller percentage of the direct labor is added to the cost.

To arrive at times for separate tasks that were studied I used two different methods. One was to time many different repetitions of a task with a stopwatch and determine an average time. This was done for tasks that were relatively simple and straightforward, such as keypunching, filing, and OCLC searching. For others, where there were many different parts to each task (cataloging, searching, etc.), I had each individual keep track of the amount of time spent on each activity. By using a large sample the the possibility of error incurred by using this self-timing method was reduced.

The results of the cost study are shown in detail in the following pages. First, there is an outline of general prices and a comparison with previously derived figures. Following that is a full explanation of the derivation of the PTR and Compensating Factor. Then there is a cost structure for each of the three departments studies: Acquisitions, Cataloging and Serials.

At the end of the report there is a review of the data collected. Each task is listed under the first department it is found in the main body of the report (Keypunch is found in Acquisitions, etc.). With the task is also listed the method used to determine the time figure, and the sample site of the data for the task. Due to the constraint of the total time allowed to collect data (six weeks), the number of tasks that used self-observation was greater than I had hoped it would be. There were also a few instances where sickness, vacations, or training hampered the collection of data. Overall, however, I obtained what I believed to be an adequate number of observations for each task to determine an accurate time figure.

JSC/pa

COST SCHEDULE AND COMPARISON

( ) - Figures in parentheses are the costs with the RLIN system starting in January, 1981

DEPARTMENT OR TASK	1974[1]	1977[2]	Present[3] Estimates	Results of this study
Acquisitions Searching & Handling	$3.84	-	$2.50	$4.03
Cataloging Monographs	$5.40	$6.06	$7.64	$7.66 ($7.83)
Binding Preparation (Monographs) *	$ .24	-	$ .55	$ .61
Pamphlet Binding	$ .36	-	$ .55	$ .59
Acquisitions & Cataloging of serials titles	-	-	$9.00	$16.04($16.04)
Yearly Upkeep of a Serials Title	-	-	-	$3.80
Documents **	-	-	-	$8.77 ($8.95)

* Does not include commercial binders costs

** Includes cost of cataloging monographs

1. Developed by Mr. Owais Bayunas in 1974.
2. Developed by Mr. William Treat and Mr. David Millman in 1977.
3. Estimates made in 1979 and 1980 by Mr. R.M. Ross.

PRODUCTIVE TIME RATIO

Total Number of Observations — n = 1008
Average of the "Observed Productive Time" = 81.3%

Available Number of Hrs. for Work After Deduction of Vacation, etc. = 1522 hrs./yr.

Total Number of Hrs. of Productive Work = 1237.4

PTR = 1237.4/2028 = .610

$$95\% \text{ Sample Error} = \pm 1.96\sqrt{\frac{(0.610)\ (1-.610)}{1008}}$$

$$= \pm .030$$

We are 95% certain that the PTR lies within the interval $.610 \pm .030$.

Compensating Factor = (1/PTR) - 1 = (1/.610) - 1 = .639

TASK	% of Total	Time (hrs)	Wage ($)	Cost
Shipping Room	100%	.004	$5.47	$.022
Labor Cost of Shipping Room				$.022= $.022
ACQUISITIONS				
ORDERS	44%			
Xerox Title-II's	10.1%	.013	$4.15	$.005
Search Title-II's	10.1%	.032	$4.32	$.014
Search AQ-II's	33.9%	.106	$4.32	$.155
Dealer Assignment	44%	.008	$6.39	$.022
Series Searching	11.9%	.101	$4.28	$.051
Edit Title-II's (2 times)	10.1%	.034	$4.32	$.015
Edit AQ-II's (2 times)	33.9%	.060	$4.32	$.088
Keypunch	44%	.012	$5.22	$.028
Verify	44%	.008	$5.22	$.018
RECEIVING				
Receiving Table	44%	.024	$4.15	$.044
Revising Table	13.2%	.053	$7.35	$.051
Miscellaneous Filing	44%	.031	$3.10	$.042
Keypunch & Verify	44%	.005	$5.22	$.011
Labor Cost for Orders			$.544	= $.544

TASK	%of Total	Time(Hrs.)	Wage($)	Cost
BOOKS	56%			
Multi-Vol	2.6%			
Receiving Table	2.6%	.024	$4.15	$.003
Multi-Vol Searching	2.6%	.106	$4.36	$.012
Revising	2.6%	.043	$7.35	$.008
Keypunch & Verify	2.6%	.005	$5.22	$.001
Labor Cost for Multi-Vols			$.024 =	$.024
Blanket Orders	7%			
Searching	7%	.091	$4.60	$.029
Pre-Selection review	7%	.008	$4.60	$.003
Series Searching	1.5%	.122	$4.28	$.008
Post-selection review	7%	.058	$4.60	$.019
Revising	7%	.043	$7.35	$.022
Keypunch	7%	.012	$5.22	$.004
Verification	7%	.008	$5.22	$.003
Labor Cost for Blanket Orders			$.088 =	$.088

TASK	% of Total	Time(Hrs.)	Wage($)	Cost
GIFTS & EXCHANGE	17.2%			
Pre-searching	17.2%	.049	$3.10	$.026
Opening Mail	4.3%	.017	$3.79	$.003
Acknowledgements	4.3%	.200	$3.79	$.063
Searching	17.2%	.142	$4.28	$.105
Reviewing	17.2%	.026	$5.43	$.024
Series searching	6.2%	.122	$4.28	$.032
Revising	17.2%	.043	$7.35	$.054
Keypunch	17.2%	.012	$5.22	$.011
Verify	17.2%	.008	$5.22	$.007
Labor Cost for Gifts & Exchange				$.295 = $.295
SERIES	17%			
Check into Kardex	17%	.075	$3.10	$.040
Handling Problems	2.2 %	.203	$4.86	$.022
Typing and Editing	17%	.060	$3.61	$.037
MSK searching	17%	.067	$4.36	$.050
Revising	17%	.027	$7.35	$.034
Keypunch	17%	.015	$5.22	$.013
Verification	17%	.010	$5.22	$.009
Labor Cost for Series				$.205 = $.205

TASK	%of Total	Time(hrs.)	Wage($)	Cost
BOOKS-IN-HAND	12.1%			
Searching	12.1%	.091	$4.32	$.048
Editing & Typing	12.1%	.060	$4.32	$.031
Revising	12.1%	.043	$7.35	$.038
Keypunch	12.1%	.012	$5.22	$.008
Verify	12.1%	.008	$5.22	$.005
Labor Cost for Books-In-Hand			$.130 =	$.130

Labor Cost for Acquisitions and Shipping Room	$1.308
Compensating Factor (.639)	.836
Total Labor Cost	$2.144
Fringe Benefits (20.5%)	.440
Overhead(21%)	.450
Total Cost of Labor, Overhead & Fringe Benefits	$3.034

EQUIPMENT AND MATERIALS

Xeroxing

Percentage of titles that need xeroxing = 10.1

Cost of xeroxing $.03

Cost of 1 sheet of Xerox paper .005

3 Title-II cards per sheet

Cost of xeroxing each Title-II card(.035/3)x.101) = .001 = $.001

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AQ-II

Cost of an AQ-II form	$.036
Percentage of titles that use AQ-II's	89.9
Cost of AQ-II per title	$.032 = $.032

COMPUTER CARDS

An average of 5 cards per title (Including STL update)	
Cost of 1 card	$.003
Cost per title	$.015 = $.015

KEYPUNCH MACHINES

Monthly cost of renting a Keypunch machine	$203.00
Yearly cost for 3 machines(203x12x3)	$7,308.00
Number of titles handled per year	56,157
Cost per title for machine rental ($7308/56,157)	$.130 = $.130

ACQUISITIONS AND IN-PROCESS CONTROL SYSTEM

Annual system's cost	$45,784
Cost per title ($45,784/56,157)	$.815 =$.815

Total Materials and Equipment cost	$.993
TOTAL COST OF ACQUISITIONS	$4.027

TASK	Cataloging % of Total	Time(hrs.)	Wage($)	Cost
		PRE-CATALOGING		
Distribute books at Cataloging table	100	.010	$14.31	.143
Search on OCLC	46	.026	4.22	.050
Second OCLC search	8.2	.026	4.22	.009
Search name-added entries in dictionary catalog	21.6	.013	4.22	.012
Shelve books on recycle shelf	8.2	.022	4.22	.008
Pull books from recycle shelf and match with AQ-II's	8.2	.024	4.22	.008
Labor cost for pre-cataloging work				$0.230 = .230
		CATALOGER DESK WORK		
L.C.	77.5	.168	$4.86	.637
Member	18.1	.388	$6.42	.451
Original	4.4	.631	$6.42	.178
Labor cost for actual cataloging				$1.265 = 1.266
		TERMINAL OPERATIONS		
Cataloging(L.C.)	77.5	.055	$4.86	.207
Inputting	22.5	.131	$4.35	.129
Proofreading	22.5	.071	$6.42	.103
Labor cost of cataloging on the terminal				$.439 = $.439

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TASK	% of Total	Time(hrs.)	Wage($)	Cost
CATALOG MAINTENANCE				
Filing, sorting, alphabetizing	100	.072	$4.36	.314
Labor Cost of Catalog Maintenance[1]			$.314 =	$.314
BOOKMARKING & KEYPUNCH				
Keypunch & verification	100	.005	$5.22	.026
Plating & Embossing	100	.007	$3.79	.027
Marking	100	.016	$3.79	.061
Labor Cost of Bookmarking & Keypunch			$.114 =	$.114

Labor cost of Cataloging	$2.363
Compensating Factor (.639)	1.510
Total labor cost	$3.873
Fringe benefits(20.5%)	.794
Overhead (21%)	.813
Total Cost of Labor, Overhead & Benefits	$5.480 = $5.480

MATERIAL AND EQUIPMENT COSTS

Marking tape	$.014
Tattle tape	.085
Keypunch cards	.003
Total Material Cost	$.102 = $.102

1) A more detailed analysis of the catalog maintenance tasks is given later in the report.

OCLC COST FOR MONOGRAPHS

Number of titles cataloged on each terminal per year = 15,000 (est.)

Terminal Cost = $3700 depreciated over 5 years = $740/year

Four out of the 16 terminals at Cornell are used for cataloging.

COST PER TITLE

Terminal Cost ($740/15,000)	$.049
Telephone Equipment Cost (($67x12)/15,000)	.054
Maintenance Contract (($33x12)/15,000)	.026
Line Charge (($286.53x12)(4/16)/15,000	.057
F.T.U. Charge (.956x$1.36)	1.300
Card Cost ($.042x14)	.588
Total OCLC Charge per title	$2.074

RLIN COST FOR MONOGRAPHS

Terminal cost - $3950 depreciated over 5 years - $790/year.
Five out of the 16 RLIN terminals will be used for cataloging.

COST PER TITLE

Terminal Cost ($790/15,000)	$.053
Maintenance Contract (($55.20x12)/15,000)	.044
Line Charge (($175x12)(5/16)/15,000)	.040
F.T.U. Charge (.775x$1.70+.181x$1.33)	1.558
Card Cost ($.0404x14)	.556
Total RLIN Cost per Title	$2.251

TOTAL COST OF CATALOGING MONOGRAPHS

Using OCLC	$7.656
Using RLIN	$7.833

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TASK	% of Total	Time(hrs.)	Wage($)	Cost
SERIALS				
ORDERING & CATALOGING				
Pre-order Searching	100	.188	$5.09	$.957
Pre-catalog Searching	100	.191	5.09	.972
Kardex Card Making	100	.120	3.79	.455
L.C. Cataloging	32	.306	6.54	.640
L.C. Terminal Work	32	.128	6.54	.268
Original & Member Cataloging	68	.352	7.84	1.877
Inputting & Proof reading	68	.148	7.84	.789
Marking in Kardex Record	100	.039	3.74	.148
Filing New Kardex Record	100	.015	3.98	.060
Labor Cost for Ordering and Cataloging a New Serial				$6.166
Compensating Factor (.639)				3.940
Total Labor Cost				$10.106
Fringe Benefits (20.5%)				2.072
Overhead (21%)				2.122
Total Cost of Labor, Fringe Benefits, & Overhead				$14.300
OCLC Costs				1.744
TOTAL COST WITH OCLC				$16.044
RLIN Cost				1.740
Total cost of Labor, Fringe Benefits, & Overhead				$14.300
TOTAL COST WITH RLIN				$16.040

OCLC COSTS FOR SERIALS

Annual Terminal Cost = $3700

Terminal is depreciated over 5 years so yearly terminal cost = $740

Number of Serials Cataloged/year = 3515

Percentage of 1 terminal time used by Serials Catalogers = .467

Percentage of Total Terminal time used by Serials Catalogers (.467x1/16)=.029

Terminal Cost (.467x$740/3515) =	$.098
Telephone Equipment Rental (.467x$804/3515) =	.107
Line Charge (.029x$3438/3515) =	.028
Maintenance Contract (.467x$396/3515) =	.053
F.T.U. Charge ($1.36x.64) =	.870
Card Cost (.042x14) =	.588
OCLC COST PER TITLE	$1.744

RLIN COSTS FOR SERIALS

Annual Terminal Cost - $3950

Terminal is depreciated over 5 years so yearly terminal cost = $790

Terminal Cost (.467x$790/3515) =	$.105
Maintenance Contract (.467x$660/3515) =	.088
Line Charge (.029x$2100/3515) =	.017
F.T.U. Charge (1.70x.32 +1.33x.32) =	.970
Card Cost (.040x14)	.560
RLIN COST PER TITLE	$1.740

TASK	% of Total	Time(hrs.)	Wage($)	Cost($)
DOCUMENTS				
Unloading and checking	100	.013	$4.91	$.064
Revising	100	.018	8.03	.145
Check into Kardex	100	.015	3.10	.047
Searching	100	.047	4.22	.197
Keypunch	100	.003	5.22	.016
Verification	100	.002	5.22	.010
Labor Cost of Documents prior to Cataloging				$.479
Compensating Factor (.639)				.306
Total Labor Cost				$.785
Fringe Benefits (20.5%)				.161
Overhead (21%)				.165
Total Cost for Overhead, Labor & Benefits				$1.111
Computer Card Cost				.003
Cost of Cataloging with OCLC				$7.656
TOTAL COST OF PROCESSING DOCUMENTS (OCLC)				$8.770
Cost of Cataloging with RLIN				$7.833
Computer Card Cost				.003
Total Cost for Overhead, Labor & Benefits				1.111
TOTAL COST OF PROCESSING DOCUMENTS (RLIN)				$8.947

TASK	% of Total	Time(hrs.)	Wage($)	Cost($)
BINDERY				
MONOGRAPHS				
Preparation for Bindery	100	.041	$3.61	$.148
Handle returning Monographs	100	.030	3.79	.114
Labor Cost for Monograph Bindery Preparation				$.262
Compensating Factor (.639)				.167
Total Labor Cost				$.429
Fringe Benefits (20.5%)				.088
Overhead (21%)				.090
Total Cost				$.607
PAMPHLET BINDING				
Binding a pamphlet	100	.047	$3.10	$.146
Compensating Factor (.639)				.093
Labor Cost				$.239
Fringe Benefits (20.5%)				.049
Overhead (21%)				.050
Total Cost of Labor, Fringe Benefits & Overhead				$.338
Material Cost of a Pamphlet Binder				.250
Total Cost of Pamphlet Binding				$.588

TASK	% of Total	Time(hrs.)	Wage($)	Cost($)
PERIODICAL BINDING				
Preparation for Bindery	100	.050	$3.79	$.190
Handle returning Serials	100	.030	3.79	.114
Labor Cost for Periodical Bindery Preparation & Handling				$.304
Compensating Factor (.639)				.194
Total Labor Cost				$.498
Fringe Benefits (20.5%)				.102
Overhead (21%)				.105
TOTAL COST				$.705

TASK	% of Total	Time(hrs.)	Wage($)	Cost($)
UPKEEP OF A SERIALS TITLE				
KARDEX MAINTENANCE				
Shipping Room	100	.004	$5.47	$.022
Alphabetizing Serials	100	.005	4.03	.020
Check into Kardex	100	.015	4.03	.060
Prepare for Distribution	100	.011	4.03	.044
Labor Cost per Issue				$.146
Total number of issues received in One Year				152,861
Total number of titles in Kardex				34,449
Average number of issues per title per year				4.43
Labor cost per year per title for Kardex Maintenance ($.146x4.43)=$.647=$.647				
INVOICES				
Paging the Invoice	100	.123	$3.98	$.489
Handling Problem Invoices	29	.158	4.28	.196
Labor Cost for Paying Invoices				$.685 = $.685
TITLE CHANGES				
1.6% of the titles in the Kardex change titles in one year.				
Searching	1.6	.500	$5.96	$.048
Cataloging	1.6	.352	7.84	.044
Inputing and Proofreading	1.6	.148	7.84	.019
Making and Marking a Kardex Card	1.6	.159	3.79	.010
Labor Cost of a Title Change				$.121 = $.121

TASK	% of Total	Time(hrs.)	Wage($)	Cost($)
CLAIMS				
An average of .172 issues per title are claimed each year.				
Typing claims	17.2	.033	$4.03	$.024
Processing	17.2	.050	3.79	.034
Labor Cost for Claims			$.058 =	$.058

Labor Cost for Upkeep of a Serials Title	$1.511
Compensating Factor (.639)	.966
Total Labor Cost	$2.477
Fringe Benefits (20.5%)	.508
Overhead (21%)	.520
Total Cost of Labor, Benefits, & Overhead	$3.505

TITLE CHANGE TERMINAL COSTS

1.6% of the titles have title changes

OCLC Cost ($1.774x.016) = $.028

RLIN Cost ($1.660x.016) = $.026

Since they are so close, I will take an average of the two figures and use that. .027

PERIODICAL BINDING PREPARATION AND HANDLING

% of Titles that are bound each year (13,298/34,449) = .386

Cost of Binding preparation per title in Kardex (.386x$.705) .272

COST OF UPKEEP OF A SERIALS TITLE EACH YEAR $3.804

REVIEW OF TEST DATA

Self = self observation Time = Time with a stopwatch by me

TASK ACQUISITIONS	Dept.	Sample size(titles)	Method
Xerox Title-II's[1]	Acquisitions	123	self
Search TitleII's	"	339	self
Search AQ-II's	"	114	self
Dealer Assignment	"	207	self
Edit AQ-II's	"	95	self
Series Searching for Orders	"	128	self
Keypunch	"	144	time
Verify	"	111	time
Receiving Table	Acquisitions	52	time
Revising books on their way to cataloging	"	127	self
Miscellaneous filing	"	70	time
Multi-vol searching	Acquisitions	40	self

1) Over a 3 1/2 week period that I tried to obtain data for xeroxing Title-II cards, the person who does this said that there were none given to her to xerox, so I used the result that Owais Bayunas obtained in 1974.

TASK	Dept.	Sample size(titles)	Method
Series searching for books	Acquisitions	136	self
Searching blanket orders	"	197	self
Pre-selection review of blanket orders	"	129	self
Post-selection review of blanket orders	"	129	self
Typing an AQ-II	Acquisitions	38	time
GIFTS & EXCHANGE			
Pre-searching	Acquisitions	55	time
Opening Mail	"	28	time
Acknowledgements	"	19	time
G&E searching	"	32	time & self
Reviewing	"	31	time
SERIES			
Check books into Kardex	Acquisitions	288	self
Handle problems in Kardex	"	37	self
MSK searching	"	78	self
Revising MSK books	"	204	self
Searching Books-In-Hand	"	257	self
Revising B-I-H	"	51	self
Shipping Room		159	time

TASK	Dept.	Sample Size	Method
CATALOGING			
Distribute books at table	Cataloging	98	time
Search on OCLC	"	65	time
Search name added entries	"	45	self
Shelve books on recycle shelf	"	35	time
Pull books from recycle shelf	"	40	time
L.C. cataloging	"	294	self
Member "	"	123	self
Original "	"	41	self
TERMINAL			
Cataloging(L.C.)	Cataloging	150	self
Inputting	"	30	self
Proofreading	"	38	self
SERIALS			
Pre-order searching	Serials	25	self
Pre-catalog searching[1]	"	30	self
Kardex card making	"	28	self
L.C. cataloging	"	50	self
L.C. Terminal work	"	45	self
Original & member cataloging	"	41	self
Inputting & proofreading	"	33	self
Marking in Kardex record	"	32	self
Filing New Kardex record	"	39	self

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1) During the time data was being collected, training was being done, so the sample size is not very large for pre-order and pre-catalog searching.

TASK	Dept.	Sample size(titles)	Method
DOCUMENTS			
Unloading and checking in	Serials	100	self & tir
Revising	"	55	self
Searching	"	134	self
BINDERY			
Monograph Prep for Bindery	"	64	time
Handling returning monographs	"	25	time
Periodical Prep	"	51	time
Handle returning periodicals	"	28	time
Pamphlet Binding	"	111	self
Plating & Embossing	"	60	time
Marking	"	75	time
UPKEEP OF KARDEX			
Alphabetize serials	"	60	time
Check into Kardex	"	79	time
Prepare for distribution	"	70	time
INVOICES			
Paying the invoice	"	39	self
Handle Problem Invoices	"	26	self
TITLE CHANGES			
Searching[1]	"	-	Est.
Cataloging[2]	"	-	Est.
CLAIMS			
Typing and processing claims[3]	"	-	Est.

1)Since a new serials searcher was being trained, no title changes were done, so an estimated figure was used.
2) During the time data was being collected, no time for title changes were timed. After consulting with the head cataloger, we determined that using the time for original & member cataloging would be appropriate.
3) The person in charge of serials claims was on an extended sick leave so estimates were used.

CATALOG MAINTENANCE

Outline and Review of Data Collected

TASK	Time	Sample Size	Method
Filing in dictionary catalog			
Main Entries	.005	100	self
Added Entries	.030	45	self
Filing in Shelf List	.003	100	self
Alphabetizing			
Added Entries	.012	45	self
Shelf list	.002	100	self
Sorting OCLC cards	.020	50	self

partial contents
in kit

NEW YORK PUBLIC LIBRARY
RESEARCH LIBRARIES

Review of Collection Policy Alternatives

JANUARY 14, 1980

Peat, Marwick, Mitchell & Co.

TABLE OF CONTENTS (partial contents in kit)

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EXECUTIVE SUMMARY

Background

NYPL is considering substantial changes in its acquisitions policy. Current thinking indicates that "major surgery" is required to focus collection activities on areas where NYPL can sustain standards of excellence. Minor cutbacks in all areas or other fine tuning are not considered adequate at this time. As a result, the NYPL Research Libraries are reviewing acquisitions policy alternatives with the following objectives:

- Develop a clear and forceful plan of reduction;
- Achieve cost reductions of approximately one-third;
- Achieve cost reductions within several years; and
- Maintain excellence in selected areas.

Several policy alternatives are being discussed. The question is this: For a given policy, what dollar savings result?

Objectives of This Study

Peat, Marwick, Mitchell & Co. (PMM Co.) has assisted NYPL in estimating potential changes in the direct costs of material acquisitions.

As precise and reliable cost accounting statistics are not available, we developed preliminary estimates of costs by division and by type of material (serials, monographs and periodicals). These estimates are used to establish reasonable ranges of cost.

Approach and Methodology

In general, we utilized the following approach:

I. METHODOLOGY

Approach

The methodology used in this study was developed to compensate for limitations in the NYPL accounting and statistical reporting systems. These include:

- Total dollar expenditures are not reported separately for monographs and serials.
- Total dollar expenditures are not reported for each division.
- Preparation Services reports counts on processing activities but is unable to verify their accuracy.
- There is an uneven flow of materials over time.
- There are delays and backlogs between order, receipt, cataloguing and the shelf which make it difficult to verify counts made at various points in the process.
- Counting foreign versus domestic publications was not possible in the time available.
- Some items received are free or are not paid for on a per item basis.
- In many cases, it is difficult to get correspondence of average price per time and a count of items paid for.

Different approaches were followed in developing the costs for the three major categories of materials:

- Monographs
- Periodicals
- Serials

Evaluation was limited to the fourteen public divisions whose acquisitions are largely supported from the General Book Fund. Special collection divisions, which utilize special funds, were excluded from consideration throughout the study.

Frequent consultation between PMM&Co. and members of Preparation Services Division was a key factor in computation of the study.

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Data Sources

Information from various sources was utilized to develop and cross-check estimates of purchasing volumes and costs. These sources consisted of:

- "Receipt" slips;
- Invoices;
- Shelf list card counts made by Records Preparation and public divisions;
- Processing statistics maintained by the following Preparation Services sections:
  - Procurement,
  - Subscription Control,
  - Receiving,
  - Adding;
- Fund accounting data;
- SADPO processing statistics on cataloguing activity;
- Holdings counts made by public divisions for current periodicals; and
- Bowker book, periodical, and serials price and publishing statistics.

Accuracy of Estimates

We agreed that a rigorous statistical evaluation of material costs at NYPL would be too time-consuming and expensive to undertake in this initial study. As a result, our evaluation of accuracy and estimates of possible ranges are based on our judgments not on statistical inference and should be interpreted accordingly.

Monographs

The methodology for determining monograph title counts, average prices and total material costs is described below.

1. A count was made by PM&Co. and Preparation Services staff of receipt slips collected in FY 79. The results:
   - Divided materials received on purchase, gift and exchange;
   - Separated items according to the public division for which they were destined; and
   - Noted prices paid for purchased items.
2. Results of the count were compared with other statistics maintained within NYPL, such as:
   - Shelf list card counts by division;
   - SADPO cataloguing activity counts by division; and
   - Receiving Section statistics (available in summary form only).
3. The prices noted during the counting process were analyzed for each public division:
   - They were summarized by general and specific order, domestic and foreign dealer.
   - Weighted averages were calculated.
   - Averages were compared to appropriate Bowker estimated averages.
4. The counts were multiplied by average prices to obtain materials costs by divisions.
5. Adjustments were made reflecting:
   - Questions about completeness of data gathering via receipt slips; and
   - Explanation of variations among counts made at different processing stages.

Monographs (continued)

6. Best estimates of expenditures on monographs by each public division were developed, based on:

   - Average prices as originally estimated;
   - Selection of the most reasonable total title count for purchased monographs; and
   - The percentage distribution of titles across the divisions as determined by our count of receipt slips.

Current Periodicals

Current periodical title counts, average prices, and total material costs were determined by following the approach outlined below.

1. All existing data on holdings by division in FY 79 were analyzed, including:

   - Statistics from Subscription Control Section's processing of invoices showing new subscriptions and renewals; and
   - Current periodicals holdings reported by public divisions.

2. In an effort to determine average prices, periodicals invoices were sampled. Results were not sufficiently reliable to be used.

3. Several members of Preparation Services Division were asked to make subjective estimates of average annual subscription prices for each public division.

   - Where appropriate, these estimates were compared to average periodical prices estimated by Bowker.

4. The total amount of expenditures for current periodicals was obtained from the Accounting Department.

5. The average length of a periodical subscription was estimated to be 1 3/4 years.

6. Best estimates of expenditures on periodicals by each public division were developed, based on:

   - Estimated average prices;
   - Invoice processing counts, which were deemed more appropriate than counts reported by divisions;
   - Average duration of subscriptions; and
   - The percentage distribution of titles across the divisions as determined by the invoice processing counts.

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Serials

Calculation of title counts, average prices, and total material costs of noncurrent serials was made in the following manner.

1. Statistics maintained by Adding Section showing receipt of serials in FY 79 were refined to eliminate inappropriate categories, such as:

   . Postings of current periodicals;

   . Adding of free items, such as federal government documents and PL 480 materials; and

   . Adding of major amounts of materials received through exchange.

2. The information was compared to data obtained from Serials Procurement Section, showing new orders and updates.

3. Serials invoices were sampled in an effort to develop average prices. The data obtained was not sufficiently reliable to be used.

4. Subjective estimates were made by Preparation Services Division personnel of average serials prices for each public division.

5. Best estimates of expenditures on serials by each public division were developed, based on:

   . The total amount calculated as the residual after monograph and periodical amounts were subtracted from the grand total of expenditures;

   . Selection of the Adding Section count and percentage distribution among divisions as the most appropriate; and

   . Estimated average prices.

II. TITLE COUNTS

Monographs

The detailed process for arriving at title counts of monographs acquired in FY 79 is described below.

1. Detailed analysis of receipt slips was the first step. These slips are initiated in the Receiving Section when a monograph is acquired.

   . Data was obtained by counting:
   - green purchase slips,
   - blue exchange slips,
   - white gift slips,
   - copies of specific orders,
   - titles on invoices.

   . Receipt slips include monographs only.

   . Public division designations are those made by Acquisitions Section personnel. Some designations are altered during the cataloguing process.

   . Certain categories of monographs escape this count. These are listed below, followed by the symbol for the public division most affected in parenthesis.
   - government documents (HEP),
   - PL 480 materials (HEP),
   - Public Affairs Information Service Materials (HEP),
   - New Technical Books titles (STC),
   - Current fiction and non-fiction obtained through the Branch Libraries (HGH),
   - Materials in vernacular languages ordered directly by language divisions (HJD, HOD, HSD).

2. The second information set utilized was shelf list card counts.

   . This data was obtained from:
   - Records Preparation Section;
   - Preparation Services Annual Report, Table 5.

   . Shelf list card counts include serials as well as monographs.

Monographs (continued)

- Shelf list cards for new titles and for changes to existing entries are included. Thus, this data is not limited to newly acquired titles as is the count of receipt slips.

3. SADPO statistics on the number of catalogued titles it processes were examined.

   - These statistics count titles keypunched and input to the Automated Book Catalog system.

   - Both monographs and serials are included, similar to the shelf list card count.

4. Finally, Receiving Section statistics were obtained.

   - These are available only in summary form, unlike the statistics described in (1), (2) and (3) above which are broken down by public division.

5. The data obtained from the analysis of receipt slips were chosen as the best estimate.

   - Data from all the available sources is summarized in Exhibit 1.

6. We estimate that our best estimates of title counts by division are within 30% of the actual FY 1979 count. This level of uncertainty results from the following factors:

   - Only half the expected number of receipt slips were on file for analysis.

   - Counts made by Preparation Services and SADPO at other points in the process were generally comparable (i.e., plus or minus 30%), but had large discrepancies in some divisions.

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Exhibit 1

NEW YORK PUBLIC LIBRARY - RESEARCH LIBRARIES

Analysis of Monograph Acquisitions

July 1, 1978 - June 30, 1979

Code	Public Division Name	Analysis of Receipt Slips				Count of Shelf List Cards		SARPO		Receiving Section Statistics			Ratio of Minimum Count to Maximum Count
		Purchase	Gift and Exchange	Total	% of Total	Additions	% of Total	Titles Catalogued	% of Total	Purchase	Gift and Exchange	Total	
MAA	Art & Architecture	696	83	779	3.2%	787	1.6%	1,887	3.4%				2.0%
MAH	American History	615	28	643	2.6	1,441	3.0	1,958	3.1				1.2
MEP	Economics & Public Affairs	4,100	510	4,610	18.8	12,160	25.1	15,345	26.1				1.4
MGR	General Research & Humanities	8,659	648	9,307	37.9	17,805	36.7	21,518	40.2				1.1
MJH	Jewish	768	26	794	3.2	1,082	2.2	1,130	1.8				1.8
MLH	Local History & Genealogy	1,231	57	1,288	5.3	1,837	3.8	2,085	3.3				1.6
MMD	Map	189	2	191	0.8	603	1.2	647	1.0				1.5
MOD	Oriental	866	347	1,213	4.9	1,227	2.5	1,829	2.9				1.9
MSD	Slavonic	1,388	790	2,178	8.9	1,339	2.8	2,139	3.4				3.
STC	Science & Technology	1,689	112	1,801	7.3	4,591	9.5	5,968	9.4				1.3
PDC	Dance	174	1	175	0.7	159	0.3	230	0.4				2.3
PMD	Music	1,094	11	1,105	4.5	2,586	5.3	2,677	4.1				1.3
PRH	Rodgers & Hammerstein	22	-	22	0.1	2,200	4.5	-	-				45.0
PTC	Theatre	286	36	322	1.3	715	1.5	846	1.3				1.2
	Total	21,777	2,758	24,535	99.5%	48,532	100.0%	63,450	100.0%	45,532	9,037	58,569	-

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Current Periodicals

To derive title counts for current periodicals (i.e., those arriving twice or more annually), the following approach was taken.

1. Counts from the Subscription Control Section's processing of invoices were obtained.

   . These counts include new subscriptions and renewals of existing orders.

2. Public divisions annually report to Preparation Services their estimates of the number of current periodicals which they hold. These estimates were examined.

   . The data contained two large amounts of holdings which require further explanation.

   - Economics and Public Affairs was credited with over 7,000 documents which were excluded from our summarization for the purposes of this study.

   - General Research and Humanities includes over 9,000 titles which are housed in Current Periodicals Room 108. These titles belong to several other divisions, but they could not accurately be reassigned.

3. The count made by the Subscription Control Section was selected as the most reasonable of the two sets of data which were available.

   . The data is displayed in Exhibit 2.

4. We estimate that the best estimates of title counts for periodicals by division are within 20% of actual counts for FY 1979. The following factors were considered:

   . Counts from public division reports of the number of titles held were considered to be reasonably accurate.

   . Subscription control counts of invoices processed showed similar percentages by division for most divisions.

Exhibit 2

NEW YORK PUBLIC LIBRARY - RESEARCH LIBRARIES

Analysis of Current Periodical Acquisitions

July 1, 1978 - June 30, 1979

Public Division Code	Public Division Name	Invoice Processing Count Number	Invoice Processing Count % of Total	Holdings Reported by Public Divisions Number	Holdings Reported by Public Divisions % of Total	Ratio of Minimum Count to Maximum Count
HAA	Art & Architecture	28	0.3%	-	-	-
HAH	American History	189	1.9	427	1.9%	1.0
HEP	Economics & Public Affairs	1,435	14.7	2,488	10.9	1.3
HGH	General Research & Humanities	4,014	41.1	9,949	43.6	1.1
HJD	Jewish	138	1.4	242	1.1	1.2
HLH	Local History & Genealogy	425	4.4	1,407	6.2	1.5
HMD	Map	16	0.2	30	0.1	2.0
HOD	Oriental	169	1.7	598	2.6	1.5
HSD	Slavonic	616	6.3	1,107	4.9	1.2
STC	Science & Technology	2,090	21.4	5,013	22.0	1.05
PDC	Dance	74	0.8	123	0.5	1.4
PMD	Music	270	2.8	748	3.3	1.2
PRH	Rodgers & Hammerstein	102	1.0	166	0.7	1.4
PTC	Theatre	197	2.0	571	2.2	1.15
	Total	9,763	100.0%	23,194	100.0%	-

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Serials

The determination of serials title counts was made in the following way.

1. The first data which was considered was obtained from the Adding Section's records.

   . The data reflects receipt of serials and additions to the Central Serials Record.

   . To the extent possible, certain categories of materials were eliminated, including:

   - posting of current periodicals;
   - federal government documents;
   - PL 480 material;
   - exchange materials.

   . Statistics for the Language divisions (Jewish, Oriental and Slavonic) do not include serials in the vernaculars.

2. Secondly, statistics showing new orders and updated orders were examined.

   . This information is gathered by the Serials Procurement Section.

3. Selection was made of the Adding Section statistics as those best reflecting actual counts.

   . Exhibit 3 displays both sets of information regarding the number of serials acquired in FY 79.

4. We estimate that best estimates of title counts for serials by division are within 10% of the actual FY 1979 counts. The following factors influenced this estimate.

   . Adding Section statistics most closely correspond to items paid for (after adjustments).

   . The total number counted by Adding Section is consistent with expectations.

Exhibit 3

NEW YORK PUBLIC LIBRARY - RESEARCH LIBRARIES

Analysis of Serials Acquisitions

July 1, 1978 - June 30, 1979

Public Division Code	Public Division Name	Adding Section Statistics Number	Adding Section Statistics % of Total	New Orders and Updates Number	New Orders and Updates % of Total	Ratio of Minimum Count to Maximum Count
HAA	Art & Architecture	680	1.4%	192	0.9%	1.5
HAH	American History	852	1.7	564	2.6	1.5
HEP	Economics & Public Affairs	14,534	29.1	7,810	35.6	1.2
HGH	General Research & Humanities	17,008	34.0	5,846	26.6	1.3
HJD	Jewish	451	0.9	308	1.4	1.5
HLH	Local History & Genealogy	1,083	2.1	691	3.1	1.5
HMD	Map	332	0.7	105	0.5	1.4
HOD	Oriental	1,626	3.2	740	3.4	1.05
HSD	Slavonic	3,789	7.6	1,669	7.6	1.0
STC	Science & Technology	8,587	17.2	2,858	13.0	1.3
PDC	Dance	26	0.1	124	0.6	6.0
PMD	Music	652	1.3	571	2.6	2.0
PRH	Rodgers & Hammerstein	22	0.1	64	0.3	3.0
PTC	Theatre	324	0.6	386	1.8	3.0
	Total	49,966	100.0%	21,956	100.0%	-

III. AVERAGE PRICES

Monographs

Once title counts had been established, the next step required the establishment of average monograph prices for each division.

1. At the same time that a count was being made of receipt slips, a sample of prices was taken for each public division, broken down among:

   - Domestic dealers
   - Foreign dealers
   - General orders
   - Specific orders

2. Foreign currencies were converted to $U.S., and the lowest, highest, and average prices were calculated.

3. Weighted averages for domestic and foreign dealers were calculated. The most appropriate average was used in determining total cost for monographs to each division.

4. Whenever possible, a comparison was made with Bowker estimated average prices.

5. In the case of the Art and Architecture Division, actual invoices were analyzed to produce a more accurate average price.

6. A summary of number of titles, average prices, and total cost by division is shown in Exhibit 4.

7. Based on the range from the statistical samples, we estimate that the actual average prices are within 25% of our estimates for monographs in FY 1979.

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Exhibit 4

NEW YORK PUBLIC LIBRARY - RESEARCH LIBRARIES

Total Cost of Purchased Monographs
July 1, 1978 - June 30, 1979

Public Division Code	Public Division Name	No. of Purchased Items (1)	Average Price	Total Cost (2)	% of Total Cost
HAA	Art & Architecture	696	28.12 (3)	$ 19,571	6.6%
HAH	American History	615	10.86 (4)	6,679	2.3
HEP	Economics & Public Affairs	4,100	14.61 (5)	59,901	20.3
HGH	General Research & Humanities	8,659	12.05 (5)	104,341	35.3
HJD	Jewish	768	14.26 (4)	10,952	3.7
HLH	Local History & Genealogy	1,231	10.02 (5)	12,335	4.2
HMD	Map	189	19.15 (4)	3,619	1.2
HOD	Oriental	866	14.99 (4)	12,981	4.4
HSD	Slavonic	1,388	4.91 (4)	6,815	2.3
STC	Science & Technology	1,689	19.02 (5)	32,125	10.9
PDC	Dance	174	6.08 (4)	1,058	0.4
PMD	Music	1,094	18.79 (5)	20,556	7.0
PRH	Rodgers & Hammerstein	22	- (5)	-	-
PTC	Theatre	286	15.07	4,310	1.5
	Total	21,777	-	$295,243	100.0%

NOTES:
(1) PER PMM&Co. count of receipt slips.
(2) Rounded to nearest dollar.
(3) Estimated through invoice tabulation for general orders averaged ($25.72).
(4) Domestic sample much larger than foreign; domestic price used.
(5) Domestic and foreign samples of comparable size; midpoint between averages used.

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Current Periodicals

The development of average prices for current periodicals was accomplished in the manner outlined below.

1. To determine average prices by division for periodicals subscriptions, invoices from major dealers were sampled. The results obtained were deemed insufficient and were not used.

2. Preparation Services personnel made estimates by division of subscription prices.

   . The various estimates were compared with each other and with appropriate Bowker estimates to determine average prices for use in this evaluation.

3. Because the title count chosen for this exercise reflects subscriptions ordered or renewed in the given year, account had to be taken of the fact that subscriptions are often ordered for periods of two or three years. Therefore, the counts were multiplied by a factor of 1.75 to obtain the best estimate of actual cost to each division.

4. Calculation of total cost to each division for current periodicals is demonstrated by Exhibit 5.

5. We estimate that actual average prices are within 30% of our best estimates. The following factors were considered:

   . Subjective estimates by NYPL's staff were an average of estimates from five people in Preparation Services.

   . These were compared to Bowker price statistics where possible.

   . These were also compared with average amounts from NYPL invoices.

   . Prices for domestic and foreign periodicals from various sources differed.

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Exhibit 5

NEW YORK PUBLIC LIBRARY - RESEARCH LIBRARIES

Total Cost of Current Periodicals
July 1, 1978 - June 30, 1979

Public Division Code	Public Division Name	Number of Titles Ordered Per Year	Average Annual Price	Total Cost of One-Year Subscriptions	Total Cost of Multiple Year Subscriptions	% of Total Cost
HAA	Art & Architecture	28	$ 15.00	$ 420	$ 735	0.16%
HAH	American History	189	15.00	2,835	4,961	1.08
HEP	Economics & Public Affairs	1,435	25.00	35,875	6,278	13.66
HGH	General Research & Humanities	4,014	20.00	80,280	140,490	30.58
HJD	Jewish	138	15.00	2,070	3,622	0.73
HLH	Local History & Genealogy	425	10.00	4,250	7,437	1.62
HMD	Map	16	15.00	240	420	0.09
HOD	Oriental	169	20.00	3,380	5,915	1.29
HSD	Slavonic	616	15.00	9,240	1,617	3.52
STC	Science & Technology	2,090	55.00	114,950	201,162	43.78
PDC	Dance	74	10.00	740	1,295	0.28
PMD	Music	270	15.00	4,050	7,087	1.54
PRH	Rodgers & Hammerstein	102	12.50	1,275	2,231	0.49
PTC	Theatre	197	15.00	2,955	5,171	1.13
	Total	9,763	-	$262,560	$459,480	100.00%

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Serials

The estimates of average serials prices were derived from the following process.

1. Invoices were sampled in an attempt to determine average serials prices. Results were disappointing and could not be used.

2. No independent sources for such prices could be found. Bowker estimates of average prices were available for serials services only.

3. Estimated average prices were obtained by working backward:

   - Expenditures on serials were derived by eliminating monograph and periodical expenses from FY 1979 total expenditures.

   - Division average prices were kept in the same proportion to one another as for periodical average prices.

4. Estimated average prices were multiplied by Adding Section title counts to obtain total cost for each division. This information is shown in Exhibit 6.

5. We estimate that actual average serial prices are within 50% of our best estimates. The following factors were considered:

   - Serials and current periodicals prices were initially assumed to be the same within each division. This gave results that were inconsistent with total expenditures reported by fund accounting.

   - Serials prices were then assumed to be proportional to price estimates for current periodicals.

   - Although divisional serials counts are believed to be accurate, the total NYPL expenditures for serials is not known.

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Exhibit 6

NEW YORK PUBLIC LIBRARY - RESEARCH LIBRARIES

Total Cost of Serials
July 1, 1978 - June 30, 1979

Public Division Code	Public Division Name	Number of Titles	Average Price	Total Cost	% of Total Cost
HAA	Art & Architecture	680	$ 8.60	$ 5,848	0.8%
HAH	American History	852	8.60	7,327	1.0
HEP	Economics & Public Affairs	14,534	14.35	208,562	27.4
HGH	General Research & Humanities	17,008	11.50	195,592	25.7
HJD	Jewish	451	8.60	3,878	0.51
HLH	Local History & Genealogy	1,083	5.75	6,227	0.82
HMD	Map	332	8.60	2,855	0.38
HOD	Oriental	1,626	11.50	18,699	2.46
HSD	Slavonic	3,789	8.60	32,585	4.28
STC	Science & Technology	8,587	31.55	270,919	38.59
PDC	Dance	26	5.75	149	0.02
PMD	Music	652	8.60	5,607	0.74
PRH	Rodgers & Hammerstein	22	7.20	158	0.02
PTC	Theatre	324	8.60	2,786	0.37
	Total	49,966	-	$761,196	100.0%

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IV. ESTIMATED MATERIAL COSTS

We have prepared two exhibits which present estimates of NYPL material costs. These estimates are the principal product of this study and provide a basis for evaluating the cost impacts of alternative acquisition policies. This section briefly discusses their derivation, interpretation and accuracy.

Total Costs by Type of Material

Exhibit 7 presents a summary of total NYPL material costs estimates and relates these to expenditures reported in NYPL Fund Accounting reports. Estimates for the fourteen divisions are divided into:

- monographs;
- serials; and
- current periodicals.

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Estimates for these include funds from the General Book Fund and special funds assigned to these divisions. Schomberg and several other special divisions were not analyzed in detail.

The "best estimates" in this exhibit are not exactly equal to those shown in Exhibit 8 due to rounding errors in detail calculations.

Specific explanations of the numbers in Exhibit 7 are given in the footnotes.

The accuracy of estimates of total material costs is discussed below:

- Monographs

  We believe that the total of $610,090 is within 25-30% of the actual FY 1979 expense. The source of this uncertainty results from:

  - uncertainty regarding the total count of items paid for; and
  - uncertainty regarding the average price over all divisions.

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Exhibit 7

New York Public Library - Research Libraries

Comparison of Estimated Total Material Costs
By Type of Material
(Schomberg Collection Excluded)
July 1, 1978 - June 30, 1979

	Maximum	Minimum	Best Estimate
Monographs	$ 690,000(1)	$ 295,243(2)	$ 610,090(3)
Serials	1,321,380(4)	535,235(5)	758,110(6)
Periodicals	459,480(7)	333,664(8)	459,480(9)
Sub-Total	2,805,570	1,164,142	1,827,680(10)
Schomberg, All Materials	N/A	N/A	185,700
Special Funds Not Spent on Divisions Included Above	N/A	N/A	202,647(11)
TOTAL FUNDS	$ 2,805,570	$ 1,164,142	$ 2,229,155(12)

NOTES:
(1) Maximum estimate is based on 49,532 items counted by the Receiving Section.
(2) Derived from green slip counts times average prices estimated from sample. Total count of 21,777 was considered to be too low, perhaps by a factor of 2.
(3) Best guess is obtained assuming 45,000 monograph items were paid for in FY 78-79, with allocation to divisions and prices the same as in (2) above.
(4) Based on average prices estimated by Acquisitions Staff for annual cost and counts recording by the Adding Section.
(5) Based on average prices estimated by Acquisitions Staff and counts from new order processing. (Note: J. Seligman thinks this count is inappropriate.)
(6) This best estimate of total serials expenditures is computed as a residual. Estimated costs of monographs, periodicals, and excluded divisions were subtracted from the reported total funds spent in FY 1979.
(7) Based on fund accounting data for FY 79, periodicals costs cannot exceed the total ($1,827,680) less
(8) Total funds spent in periodicals general fund #348. GBF spending ($1,398,000).
(9) Based on estimated average prices X invoice processing counts X 1-3/4.
(10) Includes $163,508 of Special Funds.
(11) Special Funds spent on special collections per Accounting Department.
(12) Grand Total All Funds.

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. Serials

Since the estimate of $758,110 was derived from the estimates of total spending on monographs and current periodicals, it can be no more accurate than the others. Accordingly, we estimate that this total dollar estimate is within 30% of actual FY 1979 spending.

. Periodicals

We estimate that the actual total spent for periodicals in FY 1979 is between $459,480 and $333,664 - a range of 20% around the midpoint ($396,572). This reflects the following considerations:

- The range is firmly established by NYPL Fund Accounting records.

- The maximum corresponds to an estimate based on divisional counts and average prices.

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Total Costs by Division

Exhibit 8 presents a summary of estimated material costs for the fourteen divisions included in this study. Estimates are made by material type:

. monographs,
. serials,
. current periodicals,

and are added to estimate total cost within a division for FY 1979. These figures represent our best estimates of material costs by division. The totals correspond to figures shown on Exhibit 7. (Differences were caused by rounding errors.)

The accuracy of divisional cost estimates is discussed below:

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Exhibit 8

NEW YORK PUBLIC LIBRARY - RESEARCH LIBRARIES

Summary of Expenditures From All Funds
July 1, 1978 - June 30, 1979

Code	Public Division Name	Total Cost	MONOGRAPHS % of Total	MONOGRAPHS Total Cost	SERIALS % of Total	SERIALS Total Cost	PERIODICALS % of Total	PERIODICALS Total Cost
HAA	Art & Architecture	$ 46,849	6.6%	$ 40,266	0.8%	$ 5,848	0.16%	$ 735
HAH	American History	26,320	2.3	14,032	1.0	7,327	1.08	4,961
HEP	Economics & Public Affairs	395,192	20.3	123,848	27.4	208,562	13.66	62,781
HGH	General Research & Humanities	551,444	35.3	215,362	25.7	195,592	30.58	140,490
HJD	Jewish	30,074	3.7	22,573	0.51	3,878	0.79	3,622
HLH	Local History & Genealogy	39,288	4.2	25,624	0.82	6,227	1.62	7,437
HMD	Map	10,596	1.2	7,321	0.38	2,855	0.09	420
HOD	Oriental	51,458	4.4	26,844	2.46	18,699	1.29	5,915
HSD	Slavonic	62,787	2.3	14,032	4.28	32,585	3.52	16,170
STC	Science & Technology	538,582	10.9	66,500	35.59	270,919	43.78	201,162
PDC	Dance	3,884	0.4	2,440	0.02	149	0.28	1,295
PMD	Music	54,790	6.9	42,096	0.74	5,607	1.54	7,087
PRH	Rodgers & Hammerstein	2,389	-	-	0.02	158	0.49	2,231
PTC	Theatre	17,108	1.5	9,151	0.37	2,786	1.13	5,171
	Total	$1,830,757	100.00%	$610,090	100.00%	$761,197	100.00%	$459,480

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- Monographs

  The best estimates are based on multiplication of title counts (possible range: ± 30%) and estimated prices (possible range: ± 30%). This implies a possible range of ± 50-60% in each division's costs for monographs.

- Serials

  The best estimates are based on multiplication of title counts (possible range: ± 10%) and prices (possible range: ± 50%). This implies a possible range of ± 50-60% in each division's costs for serials.

- Current Periodicals

  The best estimates for current periodicals are based on multiplication of title counts (possible range: ± 20%) and prices (possible range: ± 30%). This implies that each division's cost in FY 1979 for current periodicals is within 45-50% of our estimate.

- Division Totals

  In our judgment, division totals are more accurate than estimated costs for each material. Errors that shifted costs from one material type to another (e.g., monographs to serials) have only minor effects on division totals. Therefore, we estimate that division totals are within 25% of the actual costs incurred in FY 1979.

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Comparison with Draft Collection Policy Revision

Exhibit 9 compares our best estimates of material costs by division with the possible cost reductions resulting from the draft collection policy revision dated October 1979.

The estimated cost reductions initially were prepared by the NYPL Public Division heads. Their estimates were modified by the exclusion of subject areas where less than a $500 savings was to be realized. Also, reductions from the Performing Arts Center are not counted in our total. Their estimates indicate an overall reduction of material costs by 18% in the affected divisions (approximately $335,000).

Exhibit 9

NEW YORK PUBLIC LIBRARY - RESEARCH LIBRARIES

Comparison of Draft Collection Policy Revision and Estimated Expenditures
In July 1, 1978 - June 30, 1979

Code	Public Division Name	10/79 DRAFT COLLECTION POLICY REVISION					EXPENDITURES FROM ALL FUNDS FY 79					FY '79 Special Fund Expenditures	FY '79 General Book Fund Expenditures	
		Reduced Collecting	Exclusions	Total	Total Excluding Subjects Where Reduction <$500	% of Total	Total	% of Total	Monographs	Serials	Periodicals		Total	% of Total
HAA	Art & Architecture	$ 3,500	$ 100	$ 3,600	$ 3,500	1.0%	$ 46,849	2.6%	$ 40,266	$ 5,858	$ 735	$ 8,402	$ 38,447	2.24%
HAH	American History	2,500	-	2,500	2,500	0.7	26,320	1.4	14,032	7,327	4,961	3,916	22,404	1.31
HEP	Economics & Public Affairs	63,000	-	63,000	63,000	18.7	395,192	21.6	123,848	208,563	62,781	41,368	353,824	20.66
HGH	General Research & Humanities	157,500	-	157,500	157,500	46.8	551,444	30.1	215,362	195,592	140,490	12,241	539,203	31.48
HJD	Jewish	1,000	333	1,333	1,000	0.3	30,074	1.6	22,573	3,879	3,622	6,803	23,271	1.36
HLH	Local History & Genealogy	5,000	-	5,000	5,000	1.5	39,289	2.2	25,624	6,227	7,437	3,403	35,886	2.10
HMD	Map	200	400	600	-	-	10,596	0.6	7,321	2,855	420	-	10,596	0.62
HOD	Oriental	10,000	333	10,333	9,700	2.9	51,458	2.8	26,844	18,699	5,915	-	51,458	3.0
HSD	Slavonic	3,000	333	3,333	3,000	0.9	62,787	3.4	14,032	32,585	16,170	714	62,073	3.62
STC	Science & Technology	86,000	6,500	92,500	91,700	27.2	538,582	29.5	66,500	270,920	201,162	1,649	536,933	31.35
PDC	Dance	150	10	160	-	-	3,884	0.2	2,440	149	1,295	3,184	698	0.04
PHD	Music	675	200	875	-	-	54,790	3.0	42,096	5,607	7,087	35,979	18,811	1.10
PRH	Rodgers & Hammerstein	165	-	165	-	-	2,390	0.1	-	158	2,231	310	2,080	0.12
PTC	Theatre	4,900	200	5,100	-	-	17,109	0.9	9,151	2,786	5,171	-	17,109	1.09
	Total	$337,590	$ 8,409	$345,999	$336,900	100.0%	$1,830,767	100.0	$610,090	$761,197	$459,480	$117,971	$1,712,796	100.00%

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Our estimates of total costs by division can be used to place estimated reductions in context. For example, the largest estimated reduction was in the General Research and Humanities Division, which was a 28% reduction in the estimated total cost of $551,444.

Our estimates can also be used by NYPL to estimate cost reductions resulting from major cutbacks in certain divisions and types of materials.

Exhibit 9 also details the allocation of Special Funds and General Book funds for the fourteen divisions. This is based on our estimates of total costs by division. Allocation of special funds to the divisions shown in Exhibit 9 was prepared by the Acquisition division.